Enterprise Skills Initiative

# Azure Training Journey

Find the most recent version at
aka.ms/ESIAzureTrainingJourney

Last updated November 2021

# Table of contents

# Introduction

## Sharpening your team's cloud skills begins here

Achieve your goals with the freedom and flexibility to build, manage, and deploy your applications anywhere. Use your preferred languages, frameworks, and infrastructure— even your own data center and other clouds—to solve challenges large and small. With help from Microsoft Azure, you have everything you need to build your next great solution, and with help from the Enterprise Skills Initiative (ESI), you have the structure and resources that empower your teams as they expand their technical skillsets.

The ESI program supports IT pros, developers, and data and AI professionals in your organization to get the skills they need to cover all the aspects of your digital transformation—managing on-premises, hybrid, or cloud infrastructure; innovating with the best-in class applications; and supporting apps and infrastructure with data and analytics, all with the proper security considerations.
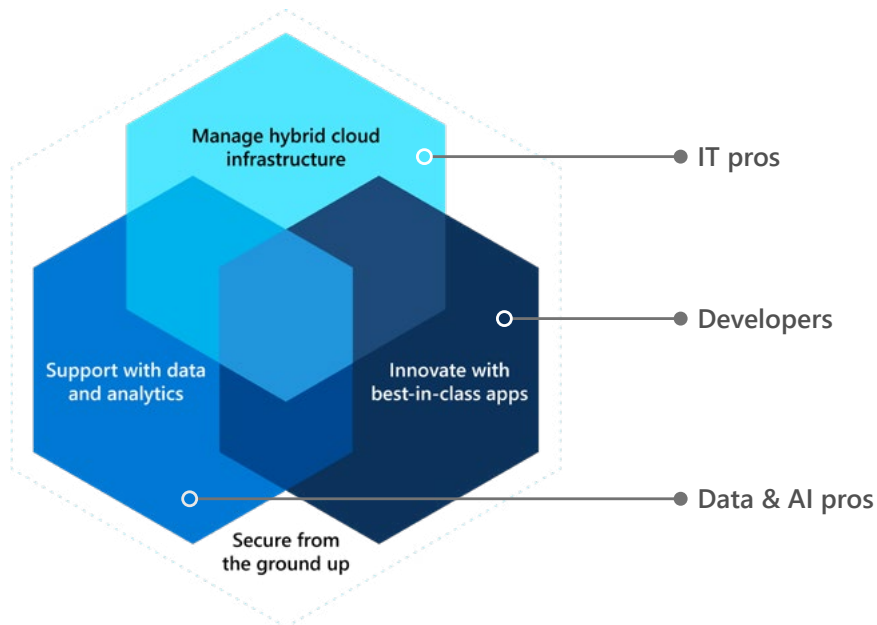


## The right journey leads to long-term growth

**A map for the next milestone**
Use this guidebook to discover the recommended journey for your team. The following pages describe the recommended tracks learners can take to receive the maximum benefits of this program.

**Master the basics and beyond**
Each journey is designed to help managers and learners identify where to start and where to go based on their specific role or projects.

**Everything you need in one place**
After determining which journey is the right fit, find courses, training opportunities, and other important information that sets your team up for success.

# Find courses in the Learner Experience Portal

Whether you already know the specific training you need or you're browsing the options based on general skills or profiles, find the right Microsoft-delivered courses, Exam Prep sessions, and Virtual Training Days in the Learner Experience Portal (LxP).

## Filter by role

The best way to find a course is to select a specific role, but you can also filter by multiple roles based on your interest:

**Infrastructure**

- Administrator
- DevOps engineer
- Solutions architect
- Security engineer
- Network engineer

**App development**

- Developer
- DevOps engineer
- AI engineer

**Data management**

- Database administrator
- Data engineer
- Data analyst

**AI**

- AI engineer
- Data scientist

## Filter by time zones

In the LxP, courses are automatically presented based on the time zone in your profile. If you don't find something right away that works with your schedule, check for classes in other time zones that might fit into your workday. There are many to choose from. Simply select the time zone filter, and explore your options.

→ **Book courses, Exam Prep sessions, and Virtual Training Days at the LxP**

# Training journeys
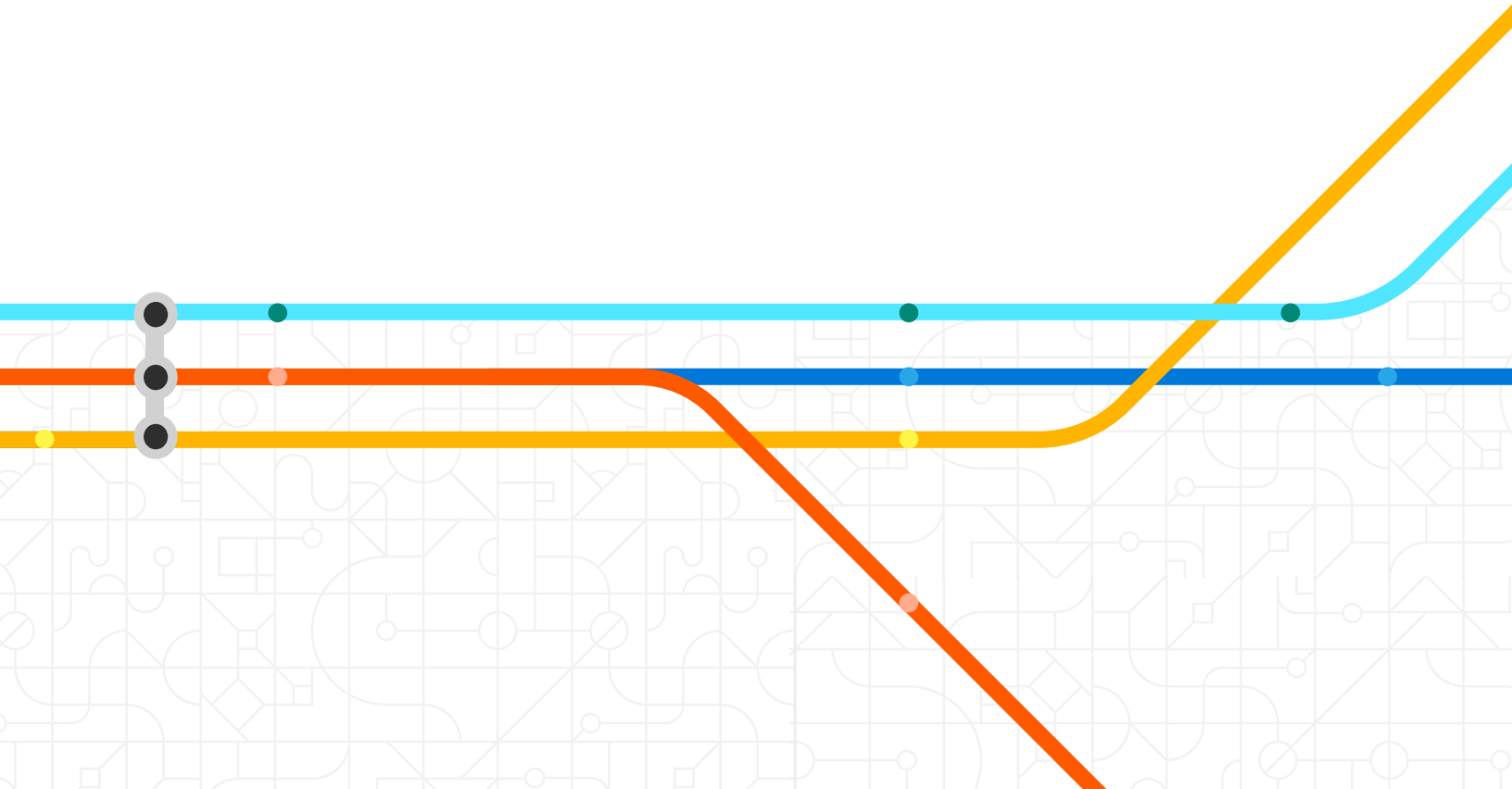
# Microsoft Azure training journey for IT pros

- Instructor-led training
- Self-paced learning
- Microsoft Virtual Training Day (MVTD)
- Exam Prep sessions

## Master the basics

### New to the cloud or new to Azure

**Azure fundamentals**

| | |
|---|---|
| Course AZ-900T00 | MVTD: Azure Fundamentals | Microsoft Learn learning paths |

Exam AZ-900 — Azure Fundamentals

## Grow in role

### Start here
### Implement, manage, and monitor cloud solutions
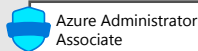
**Azure administrator**

Course AZ-104T00

**AWS background?** Consider instead Course AZ-010T00*

Microsoft Learn learning paths

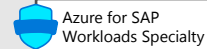Exam Prep session AZ-104

Exam AZ-104 — Azure Administrator Associate

### Manage SAP solutions on Azure

**Azure for SAP workloads**

Course AZ-120T00

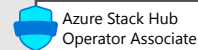Microsoft Learn learning paths

Exam AZ-120 — Azure for SAP Workloads Specialty

### Bring cloud agility on-premises

**Azure Stack Hub operator**

Course AZ-600T00*

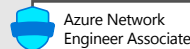Microsoft Learn learning paths

Exam AZ-600 — Azure Stack Hub Operator Associate

### Implement and manage networking solutions

**Azure network engineer**

Course AZ-700T00

Microsoft Learn learning paths

Exam AZ-700 — Azure Network Engineer Associate

### Design and implement end-to-end cloud solutions

**Azure solutions architect**

Course AZ-303T00

**AWS background?** Consider instead Course AZ-030T00*

Exam Prep session AZ-303

Course AZ-304T00

Exam Prep session AZ-304

Microsoft Learn learning paths

Exam AZ-303 Exam AZ-304 — Azure Solutions Architect Expert
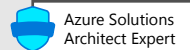
### Implement and manage secure cloud solutions

**Azure security engineer**

Course AZ-500T00

Microsoft Learn learning paths

Exam Prep session AZ-500

Exam AZ-500 — Azure Security Engineer Associate

### Deliver continuous value integrating people, processes, and technologies

**DevOps engineer**

Course AZ-400T00

Microsoft Learn learning paths

Exam Prep session AZ-400

Exam AZ-400 — DevOps Engineer Expert

### Deliver virtual desktop experiences and remote apps on Azure

**Azure Virtual Desktop administrator**

Course AZ-140T00

Microsoft Learn learning paths

Exam AZ-140 — Azure Virtual Desktop Specialty

## Continue to grow with additional training

### Migrate apps & infrastructure to the cloud

Microsoft Learn learning paths

### Manage Windows Server and hybrid cloud solutions

Course WS-012T00*

Course WS-013T00*

Microsoft Learn learning paths

### Manage Linux on Azure

Microsoft Learn learning paths

# Microsoft Azure training journey for developers

- ● Instructor-led training
- ● Self-paced learning
- ● Microsoft Virtual Training Day (MVTD)
- ● Exam Prep sessions

## Master the basics

### New to the cloud or new to Azure

**Azure fundamentals**

- Course AZ-900T00
- MVTD: Azure Fundamentals
- Microsoft Learn learning paths

Exam AZ-900 — Azure Fundamentals

### New to data solutions on Azure

**Azure data fundamentals**

- Course DP-900T00
- MVTD: Azure Data Fundamentals
- Microsoft Learn learning paths
- Exam Prep session DP-900

Exam DP-900 — Azure Data Fundamentals

### New to AI or new to AI on Azure

**Azure AI fundamentals**

- Course AI-900T00
- MVTD: Azure AI Fundamentals
- Microsoft Learn learning paths
- Exam Prep session AI-900

Exam AI-900 — Azure AI Fundamentals

## Grow in role

### Start here
### Design, build, test, and maintain cloud apps

**Azure developer**

- Course AZ-204T00

  **AWS background?** Consider instead Course AZ-020T00*
- Microsoft Learn learning paths
- Exam Prep session AZ-204

Exam AZ-204 — Azure Developer Associate

### Develop cloud and edge IoT solutions

**Azure IoT developer**

- Course AZ-220T00
- Microsoft Learn learning paths

Exam AZ-220 — Azure IoT Developer Specialty

### Design and implement end-to-end cloud solutions

**Azure solutions architect**

- Course AZ-303T00

  **AWS background?** Consider instead Course AZ-030T00*
- Exam Prep session AZ-303
- Course AZ-304T00
- Exam Prep session AZ-304
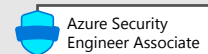- Microsoft Learn learning paths

Exam AZ-303
Exam AZ-304 — Azure Solutions Architect Expert

### Build, manage, and deploy AI solutions

**Azure AI engineer**

- Course AI-102T00
- Microsoft Learn learning paths
- Exam Prep session AI-102

Exam AI-102 — Azure AI Engineer Associate

### Deliver continuous value integrating people, processes, and technologies

**DevOps engineer**

- Course AZ-400T00
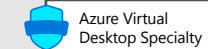- Microsoft Learn learning paths
- Exam Prep session AZ-400

Exam AZ-400 — DevOps Engineer Expert

## Continue to grow with additional training

### Migrate data to the cloud

- Course DP-050T00*
- Course DP-060T00*
- Course DP-070T00*
- Microsoft Learn learning paths

# Microsoft Azure training journey for data & AI pros

- Instructor-led training
- Self-paced learning
- Microsoft Virtual Training Day (MVTD)
- Exam Prep sessions

## Master the basics

### New to the cloud or new to Azure

**Azure fundamentals**

- Course AZ-900T00
- MVTD: Azure Fundamentals
- Microsoft Learn learning paths

Exam AZ-900 — Azure Fundamentals

### New to data solutions on Azure

**Azure data fundamentals**

- Course DP-900T00
- MVTD: Azure Data Fundamentals
- Microsoft Learn learning paths
- Exam Prep session DP-900

Exam DP-900 — Azure Data Fundamentals

### New to AI or new to AI on Azure

**Azure AI fundamentals**

- Course AI-900T00
- MVTD: Azure AI Fundamentals
- Microsoft Learn learning paths
- Exam Prep session AI-900

Exam AI-900 — Azure AI Fundamentals

## Grow in role

### Start here
### Manage relational cloud and hybrid databases

**Azure database administrator**

- Course DP-300T00
- Microsoft Learn learning paths
- Exam Prep session DP-300

Exam DP-300 — Azure Database Administrator Associate

### Start here
### Get insights from data assets

**Data analyst**

- Course DA-100T00
- Microsoft Learn learning paths
- Exam Prep session DA-100

Exam DA-100 — Data Analyst Associate

### Start here
### Build, manage, and deploy AI solutions

**Azure AI engineer**

- Course AI-102T00
- Microsoft Learn learning paths
- Exam Prep session AI-102

Exam AI-102 — Azure AI Engineer Associate

### Get structured and unstructured data ready for analytics

**Azure data engineer**

- Course DP-203T00
- Exam Prep session DP-203
- Microsoft Learn learning paths

Exam DP-203 — Azure Data Engineer Associate

### Build, train, and deploy machine learning models

**Azure data scientist**

- Course DP-100T01
- Course DP-090T00
- Microsoft Learn learning paths
- Exam Prep session DP-100

Exam DP-100 — Azure Data Scientist Associate

## Continue to grow with additional training

### Migrate data to the cloud

- Course DP-050T00*
- Course DP-060T00*
- Course DP-070T00*
- Microsoft Learn learning paths

# Microsoft-delivered instructor-led training
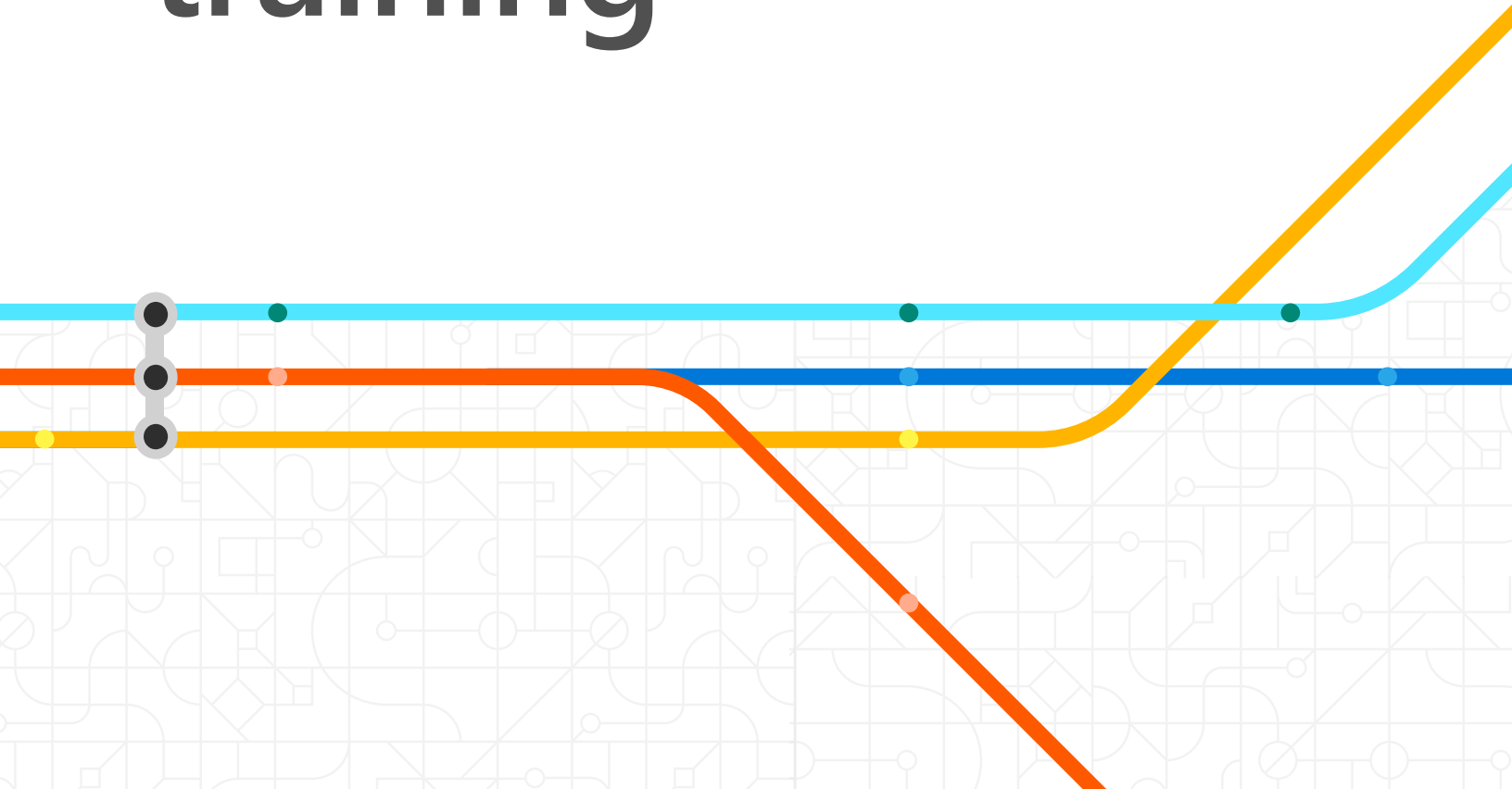
# Microsoft Azure Administrator

## Course AZ-104T00

**Duration: 4 days**

## Course description

This course teaches IT professionals how to manage Azure subscriptions, secure identities, administer the infrastructure, configure virtual networking, connect Azure and on-premises sites, manage network traffic, implement storage solutions, create and scale virtual machines, implement web apps and containers, back up and share data, and monitor solutions.

## Audience profile

This course is intended for:
- System engineers
- System administrators
- Network administrators
- Help desk administrators

## Agenda

| DAY 1 | DAY 2 | DAY 3 | DAY 4 |
|-------|-------|-------|-------|
| • Identity<br>• Governance<br>• Compliance<br>• Administration | • Virtual networking<br>• Intersite connectivity<br>• Network traffic management | • Storage<br>• Virtual machines<br>• Serverless computing | • Data protection<br>• Monitoring |

## Additional details

**Prerequisite knowledge and hands-on experience:**
Successful Azure administrators have experience in virtualization, networking, identity, and storage.
- Understanding on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks
- Understanding network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies
- Understanding Azure Active Directory concepts, including users, groups, and role-based access control
- Understanding resilience and disaster recovery, including backup and restore operations

**New to Azure?** Complete Course AZ-900T00: Microsoft Azure Fundamentals or Microsoft Learn learning paths.

**New to administering Azure?** Complete the Prerequisites for Azure Administrators learning path on Microsoft Learn.

**This course helps prepare for:**
Microsoft Certified: Azure Administrator Associate
Exam AZ-104: Microsoft Azure Administrator

**Skills measured in the exam:**
- Manage Azure Identities and Governance
- Implement and Manage Storage
- Deploy and configure virtual machines
- Configure and manage virtual networking
- Monitor and back up Azure resources

**Explore related** Exam Prep session: AZ-104.

**Explore more details for** Course AZ-104T00.

**Course coverage**
40% Lecture/Discussion | 20% Demonstrations | 40% Hands-on labs

⤒ Back to training journey for IT pros

→ Book this course in the LxP

# Microsoft Azure Security Technologies

## Course AZ-500T00

**Duration: 4 days**

## Course description

This course provides IT Security Professionals with the knowledge and skills needed to implement security controls, maintain an organization's security posture, and identify and remediate security vulnerabilities. The course includes security for identity and access, platform protection, data and applications, and security operations.

## Audience profile

**This course is intended for:**
- Cloud security engineers
- Cyber-engineers
- Security architects
- Security analysts

## Agenda

**DAY 1**
- Understand cloud security
- Compare and contrast identity solutions
- Implement Privileged Identity Management
- Manage Azure Key Vault

**DAY 2**
- Secure Azure networking
- Implement platform security
- Implement host security

**DAY 3**
- Configure security policies
- Implement data encryption
- Configure security services
- Secure applications and data

**DAY 4**
- Manage security with Azure Security Center
- Manage security with Azure Sentinel
- Configure monitoring and alerts
- Understand security baselines

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Functional knowledge in Azure administration

**New to administering Azure?** Complete **Course AZ-104T00, Course AZ-010T00,** * or Microsoft Learn learning paths.

**This course helps prepare for:**
**Microsoft Certified: Azure Security Engineer Associate
Exam AZ-500: Microsoft Azure Security Technologies**

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

**Explore related** Exam Prep session: AZ-500.

**Explore more details for Course AZ-500T00.**

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**Course coverage**
30% Lecture/Discussion | 20% Demonstrations | 50% Hands-on labs

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# Designing and Implementing Microsoft Azure Networking Solutions
## Course AZ-700T00

**Duration: 3 days**

## Course description

This course teaches network engineers how to successfully design, implement, and maintain Azure networking solutions, core Azure networking infrastructure, hybrid networking connections, load balancing traffic, network routing, private access to Azure services, and network security and monitoring. The course also includes details on how to establish hybrid connectivity, routing, private access to Azure services, and monitoring in Azure.

## Audience profile

**This course is intended for:**
• Network engineers looking to specialize in Azure networking solutions

## Agenda

**DAY 1**

• Introduction to Azure Virtual Networks
• Design and implement hybrid networking
• Design and implement Azure ExpressRoute

**DAY 2**

• Load balancing non-HTTP(S) traffic in Azure
• Load balancing HTTP(S) traffic in Azure
• Design and implement network security

**DAY 3**

• Design and implement private access to Azure Services
• Design and implement network monitoring

## Additional details

**Prerequisite knowledge and hands-on experience:**
• Enterprise networking, infrastructure, and security
• Virtual machines, virtual networking, and virtual hard disks
• Network configurations
• Software-defined networking
• Hybrid network connectivity methods
• Resilience and disaster recovery

**New to administering Azure?** Complete **Course AZ-104T00**, **Course AZ-010T00**,* or Microsoft Learn learning paths.

**This course helps prepare for:**
**Microsoft Certified: Azure Network Engineer Associate**
**Exam AZ-700: Designing and Implementing Microsoft Azure Networking Solutions**

**Skills measured in the exam:**
• 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

**Explore more details for Course AZ-700T00.**

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**Course coverage**
30% Lecture/Discussion | 20% Demonstrations | 50% Hands-on labs

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⤊ **Back to training journey for IT pros**          ⊙→ **Book this course in the LxP**

# Planning and Administering Microsoft Azure for SAP Workloads
## Course AZ-120T00

**Duration: 4 days**

## Course description

This course teaches IT Professionals experienced in SAP solutions how to leverage Azure resources that include deployment and configuration of virtual machines, virtual networks, storage accounts, and Azure AD that includes implementing and managing hybrid identities. Students of this course will learn through concepts, scenarios, procedures, and hands-on labs how to best plan and implement migration and operation of an SAP solution on Azure.

## Audience profile

**This course is intended for:**
- SAP integration architects
- Data architects
- Cloud infrastructure architects
- Enterprise architects

## Agenda

**DAY 1**
- Foundations of SAP on Azure
- SAP Certified Offerings on Azure
- SAP on Azure Reference Architecture

**DAY 2**
- Planning and implementing SAP Solutions on Azure
- Migrating SAP workloads to Azure

**DAY 3**
- Implementing VM-based SAP solutions
- Deploying HANA large instances

**DAY 4**
- Maintaining SAP on Azure
- Monitoring and troubleshooting SAP on Azure

## Additional details

**Prerequisite knowledge and hands-on experience:**
Successful Azure Administrators have experience in virtualization, networking, identity, and storage.
- Functional experience as an Azure administrator
- Knowledge of SAP Applications, SAP HANA, S/4HANA, SAP NetWeaver, SAP BW, OS  Servers for SAP applications and databases
- Understanding of SAP HANA deployment and configuration
- Hands-on experience with SAP HANA administration

**New to administering Azure?** Complete **Course AZ-104T00**, **Course AZ-010T00,*** or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure for SAP Workloads Specialty Exam AZ-120: Planning and Administering Microsoft Azure for SAP Workloads

**Skills measured in the exam:**
- Migrate SAP workloads to Azure
- Design an Azure solution to support SAP workloads
- Build and deploy Azure for SAP workloads
- Validate Azure infrastructure for SAP workloads
- Operationalize Azure SAP architecture

**Explore more details for Course AZ-120T00.**

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**Course coverage**
40% Lecture/Discussion  |  20% Demonstrations  |  40% Hands-on labs

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# Configuring and Operating Microsoft Azure Virtual Desktop
## Course AZ-140T00

**Duration: 4 days**

## Course description

This course teaches Azure administrators how to plan, deliver, and manage virtual desktop experiences and remote apps, for any device, on Azure. Students learn through a mix of demonstrations and hands-on lab experiences deploying virtual desktop experiences and apps on Azure Virtual Desktop and optimizing them to run in multi-session virtual environments.

## Audience profile

**This course is intended for:**
- Azure administrators
- Professionals interested in delivering applications on Azure Virtual Desktop and optimizing them to run in multi-session virtual environments
- Those who work closely with Azure administrators, Azure architects, and Microsoft 365 administrators

## Agenda
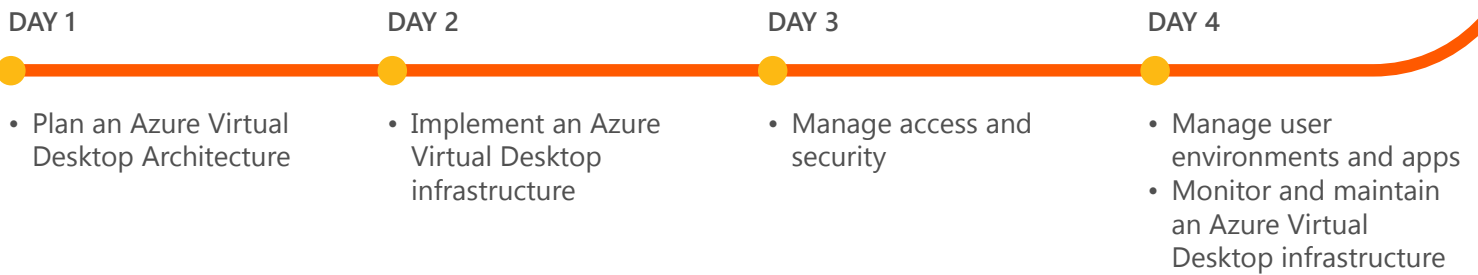
**DAY 1**
- Plan an Azure Virtual Desktop Architecture

**DAY 2**
- Implement an Azure Virtual Desktop infrastructure

**DAY 3**
- Manage access and security

**DAY 4**
- Manage user environments and apps
- Monitor and maintain an Azure Virtual Desktop infrastructure

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Functional knowledge in Azure administration

**New to administering Azure?** Complete Course AZ-104T00, Course AZ-010T00,* or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure Virtual Desktop Specialty Exam AZ-140: Configuring and Operating Microsoft Azure Virtual Desktop

**Skills measured in the exam:**
- Plan an Azure Virtual Desktop architecture
- Implement an Azure Virtual Desktop infrastructure
- Manage access and security
- Manage user environments and apps
- Monitor and maintain an Azure Virtual Desktop infrastructure

**Explore more details for Course AZ-140T00.**

**Course coverage**
25% Lecture/Discussion | 25% Demonstrations | 50% Hands-on labs

⊕ **Back to training journey for IT pros**

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# Designing and Implementing Microsoft DevOps Solutions
## Course AZ-400T00

**Duration: 5 days**

## Course description

This course provides the knowledge and skills to design and implement DevOps processes and practices. Students will learn how to plan for DevOps, use source control, scale Git for an enterprise, consolidate artifacts, design a dependency management strategy, manage secrets, implement continuous integration, implement a container build strategy, design a release strategy, set up a release management workflow, implement a deployment pattern, and optimize feedback mechanisms.

## Audience profile

This course is intended for:
- DevOps engineers
- Release managers
- Data analysts
- Product managers

## Agenda

**DAY 1**
- Plan for DevOps
- Learning Source Control
- Scaling Git
- Consolidate artifacts
- Manage configuration and secrets

**DAY 2**
- Plan for quality and security
- Manage build infrastructure
- Implement CI/CD
- Manage code quality

**DAY 3**
- Implement container strategies
- Manage artifact versions
- Set up release management
- Implement deployment pattern

**DAY 4**
- Implement feedback processes
- Implement mobile DevOps
- Azure deployment models and tools

**DAY 5**
- Manage container infrastructure
- Implement compliance and security
- Optimize feedback mechanisms

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Azure administration and Azure development with proven expertise in at least one of these areas
- Cloud computing concepts, including an understanding of PaaS, SaaS, and IaaS implementations
- Version control, agile software development, and core software development principles. It would be helpful to have experience in an organization that delivers software

**New to administering Azure?** Complete **Course AZ-104T00, Course AZ-010T00,** * or Microsoft Learn learning paths.

**New to developing apps on Azure?** Complete **Course AZ-204T00, Course AZ-020T00,** * or Microsoft Learn learning paths.

This course helps prepare for:
**Microsoft Certified: DevOps Engineer Expert**
**Exam AZ-400: Designing and Implementing Microsoft DevOps Solutions**

**Skills measured in the exam:**
- Design a DevOps strategy
- Implement DevOps development processes
- Implement continuous integration and deliver
- Implement dependency management
- Implement application infrastructure
- Implement continuous feedback

**Explore related** Exam Prep session: AZ-400.

**Explore more details for** Course AZ-400T00.

| Course coverage |
| --- |
| 30% Lecture/Discussion  \|  20% Demonstrations  \|  50% Hands-on labs |

# Microsoft Azure Architect Technologies
## Course AZ-303T00

Duration: 5 days

## Course description

This course teaches solutions architects how to translate business requirements into secure, scalable, and reliable solutions. Lessons include virtualization, automation, networking, storage, identity, security, data platform, and application infrastructure. The course outlines how decisions in each area affect an overall solution.

## Audience profile

This course is intended for:
• Solution architects
• Enterprise architects
• Cloud consultants
• Cloud engineers

## Agenda

| DAY 1 | DAY 2 | DAY 3 | DAY 4 | DAY 5 |
|---|---|---|---|---|
| • Implement virtual networking<br>• Implement VMs<br>• Automate deployments | • Implement load balancing and network security<br>• Implement storage accounts<br>• Implement Azure Active Directory | • Implement governance<br>• Implement hybrid identity<br>• Manage workloads | • Implement monitoring<br>• Manage app security<br>• Implement app infrastructure | • Implement containers<br>• Implement NoSQL databases<br>• Implement Azure SQL databases |

## Additional details

**Prerequisite knowledge and hands-on experience:**
• Functional knowledge of Azure administration
• Cloud solution awareness: Students should have experience using the Azure Portal and solid understanding of PaaS, SaaS, and IaaS implementations
• Software development experience is a prerequisite for this course, but no specific software language is required, and the experience does not need to be at a professional level
• General understanding of data storage and data processing is recommended but not required

**New to developing apps on Azure?** Complete Course AZ-204T00, Course AZ-020T00,* or Microsoft Learn learning paths.

**New to administering Azure?** Complete Course AZ-104T00, Course AZ-010T00,* or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure Solutions Architect Expert
Exam AZ-303: Microsoft Azure Architect Technologies

**Skills measured in the exam:**
• Deploy and configure infrastructure
• Implement workloads and security
• Create and deploy apps
• Implement authentication and secure data
• Develop for the cloud and Azure storage

**Explore related** Exam Prep session: AZ-303.

**Explore more details for** Course AZ-303T00.

| Course coverage |
|---|
| 30% Lecture/Discussion  |  20% Demonstrations  |  50% Hands-on labs |

*Courses AZ-010T00 and AZ-020T00 are only delivered by Learning Partners.

# Microsoft Azure Architect Design

## Course AZ-304T00

**Duration: 4 days**

## Course description

This course teaches solution architects how to translate business requirements into secure, scalable, and reliable solutions. Lessons include design considerations related to logging, cost analysis, authentication and authorization, governance, security, storage, high availability, and migration.

## Audience profile

**This course is intended for:**
- Solution architects
- Enterprise architects
- Cloud consultants
- Cloud engineers

## Agenda

**DAY 1**
- Design a compute solution
- Design a network solution
- Design for migration

**DAY 2**
- Design authentication and authorization
- Design governance
- Design databases
- Select an appropriate storage account

**DAY 3**
- Design for data integration
- Design a solution for logging and monitoring
- Design a solution for backup and recovery

**DAY 4**
- Design for high availability
- Design for cost optimization
- Design an app architecture
- Design security for applications

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Azure Solution Architect Technologies:
  **Course AZ-303T00, Course AZ-030T00,**\*
  or Microsoft Learn learning paths
- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies
- Understanding of resilience and disaster recovery, including backup and restore
- Understanding of decoupling applications and services,for example, queues, tables, cache
- Understanding of security concepts to protect an environment, like encryption at rest, encryption in transit, SSL, TLS

**This course helps prepare for:**
**Microsoft Certified: Azure Solutions Architect Expert**
**Exam AZ-304: Microsoft Azure Architect Design**

**Skills measured in the exam:**
- Design monitoring
- Design identity and security
- Design data storage
- Design business continuity
- Design infrastructure

**Explore related** Exam Prep session: AZ-304.

**Explore more details for** Course AZ-304T00.

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**Course coverage**
40% Lecture/Discussion | 20% Demonstrations | 40% Hands-on labs

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⤒ **Back to training journey for IT pros**

⤒ **Back to training journey for developers**

⮕ **Book this course in the LxP**

# Developing solutions for Microsoft Azure

## Course AZ-204T00

**Duration: 5 days**

## Course description

This course teaches developers how to create end-to-end solutions in Microsoft Azure. Students will learn how to implement Azure compute solutions, create Azure Functions, implement and manage web apps, develop solutions utilizing Azure Storage, implement authentication and authorization, and secure their solutions by using Key Vault and Managed Identities.

## Audience profile

**This course is intended for:**
- Web developers
- Application developers
- Full stack developers
- Software engineers

## Agenda

| DAY 1 | DAY 2 | DAY 3 | DAY 4 | DAY 5 |
|-------|-------|-------|-------|-------|
| • Create App Service Web Apps<br>• Implement Azure Functions<br>• Develop Solutions using Blob Storage | • Develop Solutions using Azure Cosmos DB<br>• Implement IaaS Solutions<br>• Implement User Authentication and Authorization | • Implement Secure Cloud Solutions<br>• Implement API Management<br>• Develop App Service Logic Apps | • Develop Event-based Solutions<br>• Develop Message-based Solutions | • Monitor and Optimize Azure Solutions<br>• Integrate Caching and Content Delivery |

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Hands-on experience with Azure IaaS and PaaS solutions, and the Azure Portal
- Experience writing in an Azure supported language at the intermediate level (C#, JavaScript, Python, or Java)
- Ability to write code to connect to, and perform operations on, a SQL or NoSQL database product (SQL Server, Oracle, MongoDB, Cassandra, or similar)
- Experience writing code to handle authentication, authorization, and other security principles at the intermediate level
- General understanding of HTML, the HTTP protocol, and REST API interfaces

**New to Azure?** Complete Course AZ-900T00: Microsoft Azure Fundamentals or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure Developer Associate
Exam AZ-204: Developing Solutions for Microsoft Azure

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

**Explore related** Exam Prep session: AZ-204.

**Explore more details for** Course AZ-204T00.

**Course coverage**
30% Lecture/Discussion | 20% Demonstrations | 50% Hands-on labs

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# Microsoft Azure IoT Developer

## Course AZ-220T00

**Duration: 4 days**

## Course description

This course provides students with the skills and knowledge required to successfully create and maintain the cloud and edge portions of an Azure IoT solution. The course includes full coverage of the core Azure IoT services such as IoT Hub, device provisioning services, Azure Stream Analytics, Time Series Insights, and more. This course also includes sections on IoT Edge, device management, monitoring and troubleshooting, security concerns, and Azure IoT Central.

## Audience profile

**This course is intended for:**
• IoT data engineers
• IoT data scientists
• IoT cloud architects
• IoT infrastructure engineers

## Agenda

**DAY 1**

• Introduction to IoT and Azure IoT services
• Devices and device communication
• Device provisioning at scale

**DAY 2**

• Message processing and analytics
• Insights and business integration
• Azure IoT Edge deployment process

**DAY 3**

• Azure IoT Edge Modules and Containers
• Device management
• Solution testing, diagnostics, and logging

**DAY 4**

• Azure Security Center and IoT security considerations
• Build an IoT solution with IoT Central

## Additional details

**Prerequisite knowledge and hands-on experience:**
• Functional knowledge of Azure administration, development, and architecture
• Software development experience
• Data processing experience
• Cloud solution awareness

**New to developing apps on Azure?** Complete Course AZ-204T00, Course AZ-020T00,* or Microsoft Learn learning paths.

**New to administering Azure?** Complete Course AZ-104T00, Course AZ-010T00,* or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure IoT Developer Specialty Exam AZ-220: Microsoft Azure IoT Developer

**Skills measured in the exam:**
• Implement the IoT solution infrastructure
• Provision and manage devices
• Implement Edge
• Process and manage data
• Monitor, troubleshoot, and optimize IoT solutions
• Implement security

**Explore more details for Course AZ-220T00.**

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**Course coverage**
40% Lecture/Discussion | 20% Demonstrations | 40% Hands-on labs

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# Administering Relational Databases on Microsoft Azure
## Course DP-300T00

**Duration: 4 days**

## Course description

This course provides students with the knowledge and skills to administer a SQL Server database infrastructure for cloud, on-premises, and hybrid relational databases. The course is useful for individuals who work with Microsoft PaaS relational database offerings and those who develop applications that deliver content from SQL-based relational databases.

## Audience profile

**This course is intended for:**
- Database administrators
- Database architects
- Application developers

## Agenda

| DAY 1 | DAY 2 | DAY 3 | DAY 4 |
|---|---|---|---|
| • Introducing database administrators<br>• Plan and implement data platform resources | • Implement a secure environment<br>• Monitor and optimize operational resources | • Optimize query performance<br>• Implement task automation | • Plan for high availability and disaster recovery |

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Functional knowledge of Azure and data on Azure
- Professional experience in database management and technical knowledge of cloud technologies, specifically working with, maintaining, and developing with SQL Server

**New to Azure?** Complete Course AZ-900T00: Microsoft Azure Fundamentals or Microsoft Learn learning paths.

**New to data on Azure?** Complete Course DP-900T00: Microsoft Azure Data Fundamentals or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure Database Administrator Associate
Exam DP-300: Administering Relational Databases on Microsoft Azure

**Skills measured in the exam:**
- Plan and implement data platform resources
- Implement a secure environment
- Monitor and optimize operational resources
- Optimize query performance
- Perform automation of tasks
- Plan and implement a High Availability and Disaster Recovery environment
- Perform administration by using T-SQL

**Explore related** Exam Prep session: DP-300.

**Explore more details for** Course DP-300T00.

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**Course coverage**
40% Lecture/Discussion | 20% Demonstrations | 40% Hands-on labs

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# Data Engineering on Microsoft Azure
## Course DP-203T00

**Duration: 4 days**

## Course description

This course covers data engineering patterns and practices around batch and real-time analytical solutions using Azure data platform technologies. It also explores core compute and storage technologies that are used to build an analytical solution. Learners get the details on ingestion techniques using the Apache Spark capability found in Azure Synapse Analytics or Azure Databricks, plus Azure Data Factory or Azure Synapse pipelines. They also build predictive models in Azure Synapse Analytics.

## Audience profile

This course is intended for:
- Data professionals
- Data architects
- Data analysts
- Data scientists
- Business intelligence professionals

## Agenda

**DAY 1**
- Explore compute and storage options
- Design and implement the serving layer
- Data engineering considerations for source files
- Run interactive queries

**DAY 2**
- Work with data using Apache Spark
- Data exploration in Azure Databricks
- Ingest and load data into the data warehouse
- Azure Data Factory and Azure Synapse Pipeline

**DAY 3**
- Orchestrate data movement and transformation
- Optimize query performance
- Analyze and optimize data warehouse storage
- Support HTAP with Azure Synapse Link

**DAY 4**
- End-to-end security with Azure Synapse Analytics
- Real-time Stream Processing with Stream Analytics
- Create a Stream Processing solution
- Build reports using Power BI
- Perform integrated machine learning processes

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Solid knowledge of data processing languages, such as SQL, Python, or Scala
- An understanding of parallel processing and data architecture patterns

**New to Azure?** Complete **Course AZ-900T00: Microsoft Azure Fundamentals** or Microsoft Learn learning paths.

**New to data on Azure?** Complete **Course DP-900T00: Microsoft Azure Data Fundamentals** or Microsoft Learn learning paths.

This course helps prepare for:
**Microsoft Certified: Azure Data Engineer Associate**
**Exam DP-203: Data Engineering on Microsoft Azure**

**Skills measured in the exam:**
- Design and implement data storage
- Design and develop data processing
- Design and implement data security
- Monitor and optimize data storage and data processing

Explore related **Exam Prep session: DP-203**.

Explore more details for **Course DP-203T00**.

| Course coverage |
| --- |
| 25% Lecture/Discussion  \|  25% Demonstrations  \|  50% Hands-on labs |

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# Analyzing Data with Power BI
## Course DA-100T00

**Duration: 4 days**

## Course description

In this course students will learn the various methods and best practices that are in line with business and technical requirements for modeling, visualizing, and analyzing data with Microsoft Power BI, how to access and process data from a range of data sources including relational and non-relational data, and how to implement proper security standards and policies across the Power BI spectrum including datasets and groups.

## Audience profile

**This course is intended for:**
- Data and business intelligence professionals.
- Individuals who develop reports and data visualizations.

## Agenda

**DAY 1**
- Introducing data analytics
- Prepare data in Power BI
- Clean, transform, and load data

**DAY 2**
- Design a data model
- Create measures using DAX
- Optimize model performance

**DAY 3**
- Create reports, dashboards, and paginated reports
- Perform advanced analytics

**DAY 4**
- Manage workspaces
- Manage datasets
- Implement row-level security

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Functional knowledge of Azure and data on Azure
- Functional knowledge of Microsoft Power BI Experience working with data in the cloud. Specifically:
  - Understanding core data concepts
  - Knowledge of working with relational data in the cloud
  - Knowledge of working with non-relational data in the cloud
  - Knowledge of data analysis and visualization concepts

**New to Azure?** Complete **Course AZ-900T00: Microsoft Azure Fundamentals** or Microsoft Learn learning paths.

**New to data on Azure?** Complete **Course DP-900T00: Microsoft Azure Data Fundamentals** or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Data Analyst Associate
Exam DA-100: Analyzing Data with Microsoft Power BI

**Skills measured in the exam:**
- Prepare the data
- Model the data
- Visualize the data
- Analyze the data
- Deploy and maintain deliverables

**Explore related** Exam Prep session: DA-100.

**Explore more details for** Course DA-100T00.

**Course coverage**
25% Lecture/Discussion | 25% Demonstrations | 50% Hands-on labs

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# Designing and Implementing a Microsoft Azure AI Solution
## Course AI-102T00

**Duration: 4 days**

## Course description

This course is intended for software developers wanting to build AI-infused applications that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework. The course will use C# or Python as the programming language.

## Audience profile

**This course is intended for:**
- AI engineers
- Software developers
- Machine learning engineers
- Data scientists

## Agenda

| DAY 1 | DAY 2 | DAY 3 | DAY 4 |
|---|---|---|---|
| • Introduction to AI on Azure<br>• Developing AI apps with Cognitive Services<br>• Getting started with natural language processing | • Building speech-enabled applications<br>• Creating language understanding solutions<br>• Building a QnA solution | • Conversational AI and the Azure Bot Service<br>• Getting started with computer vision<br>• Developing custom vision solutions | • Detecting, analyzing, and recognizing faces<br>• Reading text in images and documents<br>• Creating a knowledge mining solution |

## Additional details

**Prerequisite knowledge and hands-on experience:**
- Proficiency in C#, Python, or JavaScript
- Ability to use REST-based APIs and SDKs to build computer vision, natural language processing, knowledge mining, and conversational AI solutions on Azure
- An understanding of the components that make up the Azure AI portfolio and the available data storage option
- An understanding of and the ability to apply responsible AI principles

New to Azure? Complete **Course AZ-900T00: Microsoft Azure Fundamentals** or Microsoft Learn learning paths.

New to AI or AI on Azure? Complete **Course AI-900T00: Microsoft Azure AI Fundamentals** or Microsoft Learn learning paths.

**This course helps prepare for:**
**Microsoft Certified: Azure AI Engineer Associate Exam AI-102: Designing and Implementing a Microsoft Azure AI Solution**

**Skills measured in the exam:**
- 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

**Explore related** Exam Prep session: AI-102.

**Explore more details for** Course AI-102T00.

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**Course coverage**
25% Lecture/Discussion  |  25% Demonstrations  |  50% Hands-on labs

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# Designing and Implementing a Data Science Solution on Azure
## Course DP-100T01

**Duration: 3 days**

## Course description

In this course students will learn how to operate machine learning solutions at cloud scale using Azure Machine Learning. This course teaches how to leverage existing knowledge of Python and Machine Learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure.

## Audience profile

**This course is intended for:**
• Data scientists
• Machine Learning engineers
• AI engineers

## Agenda

**DAY 1**

• Introducing Azure Machine Learning
• No-Code Machine Learning with Designer
• Running experiments and training models

**DAY 2**

• Working with data
• Compute contexts
• Orchestrating operations with pipelines
• Deploying and consuming models

**DAY 3**

• Training optimal models
• Interpreting models
• Monitoring models

## Additional details

**Prerequisite knowledge and hands-on experience:**
• Functional knowledge of Azure and AI on Azure
• Experience in general data science and machine learning tools and techniques, specifically:
  • Creating cloud resources in Microsoft Azure
  • Using Python to explore and visualize data
  • Training and validating machine learning models using common frameworks like Scikit-Learn, PyTorch, and TensorFlow

**New to Azure?** Complete Course AZ-900T00: Microsoft Azure Fundamentals or Microsoft Learn learning paths.

**New to AI or AI on Azure?** Complete Course AI-900T00: Microsoft Azure AI Fundamentals or Microsoft Learn learning paths.

**This course helps prepare for:**
Microsoft Certified: Azure Data Scientist Associate
Exam DP-100: Designing and Implementing a Data Science Solution on Azure

**Skills measured in the exam:**
• Set up an Azure Machine Learning workspace
• Run experiments and train models
• Optimize and manage models
• Deploy and consume models

**Explore related** Exam Prep session: DP-100.

**Explore more details for** Course DP-100T01.

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**Course coverage**
30% Lecture/Discussion | 20% Demonstrations | 50% Hands-on labs

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# Implementing a Machine Learning Solution with Microsoft Azure Databricks
## Course DP-090T00

**Duration: 1 day**

## Course description

This course covers Azure Databricks, a cloud-scale platform for data analytics and machine learning. It teaches learners how to use Azure Databricks to explore, prepare, and model data and how to integrate Azure Databricks machine learning processes with Azure Machine Learning.

## Audience profile

**This course is intended for:**
• Data scientists who need to learn how to apply their data science and machine learning skills on Azure Databricks

## Agenda

**DAY 1**

• Introduction to Azure Databricks
• Training and evaluating machine learning models
• Managing experiments and models
• Integrating Azure Databricks and Azure Machine Learning

## Additional details

**Prerequisite knowledge:**
• Experience using Python to work with data
• Knowledge of machine learning concepts
• Complete the Microsoft Learn Create machine learning models learning path

**New to Azure?** Complete **Course AZ-900T00: Microsoft Azure Fundamentals** or Microsoft Learn learning paths.

**New to AI or AI on Azure?** Complete **Course AI-900T00: Microsoft Azure AI Fundamentals** or **Microsoft Learn learning paths**.

**This course helps prepare for:**
**Microsoft Certified: Azure Data Scientist Associate Exam DP-100: Designing and Implementing a Data Science Solution on Azure**

**Skills gained in the course:**
• Manage Azure resources for machine learning
• Run experiments and train models
• Deploy and operationalize machine learning solutions
• Implement responsible machine learning.

**Explore related Exam Prep session: DP-100.**

**Explore more details for Course DP-090T00.**

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**Course coverage**
25% Lecture/Discussion | 25% Demonstrations | 50% Hands-on labs

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# Exam Prep sessions
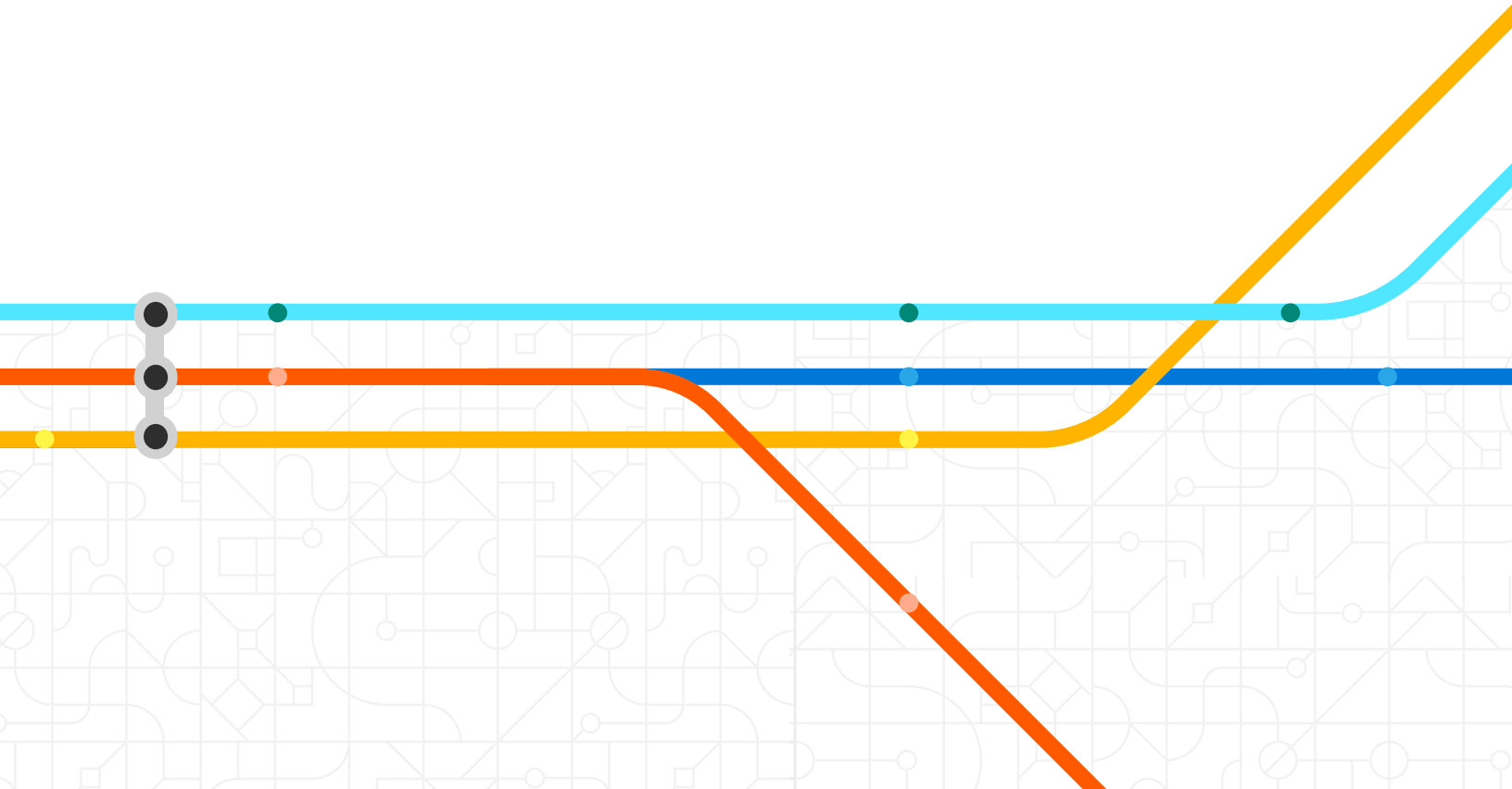
# Exam Prep session for Exam AZ-104

## Microsoft Azure Administrator

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AZ-104: Microsoft Azure Administrator.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-104**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-104: Microsoft Azure Administrator

**Exam AZ-104** is required to earn the **Azure Administrator Associate certification.**

This exam measures your ability to accomplish the following technical tasks: manage Azure identities and governance, implement and manage storage, deploy and manage Azure compute resources, configure and manage virtual networking, and monitor and back up Azure resources.

As a candidate for this exam, you should have at least six months of hands-on experience administering Azure, along with a strong understanding of core Azure services, Azure workloads, security, and governance. In addition, you need experience using PowerShell, Azure CLI, Azure portal, and Azure Resource Manager templates.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking either of these courses:

**AZ-104T00: Microsoft Azure Administrator**
**AZ-010T00: Azure Administration for AWS SysOps***

→ **Review Study Guide for Exam AZ-104**

# Exam Prep session for Exam AZ-500

## Microsoft Azure Security Technologies

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AZ-500: Microsoft Azure Security Technologies.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-500**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-500: Microsoft Azure Security Technologies

**Exam AZ-500 is required to earn the Azure Security Engineer Associate certification.**

This exam measures the ability to accomplish the following technical tasks: manage identity and access, implement platform protection, manage security operations, and secure data and applications.

Candidates for this exam should have strong skills in scripting and automation. Candidates also need a deep understanding of networking, virtualization, and cloud N-tier architecture, along with a strong familiarity with cloud capabilities, products, and services for Azure, plus other Microsoft products and services.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**AZ-500T00: Microsoft Azure Security Technologies**

⊖ **Review Study Guide for Exam AZ-500**

# Exam Prep session for Exam AZ-400

## Designing and Implementing Microsoft DevOps Solutions

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AZ-400: Designing and Implementing Microsoft DevOps Solutions.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-400**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-400: Designing and Implementing Microsoft DevOps Solutions

**Exam AZ-400 is required to earn the DevOps Engineer Expert certification.**

This exam measures the ability to accomplish the following technical tasks: develop an instrumentation strategy, a Site Reliability Engineering (SRE) strategy, and a security and compliance plan; manage source control; facilitate communication and collaboration; and define and implement continuous integration and a continuous delivery-and-release management strategy.

Candidates for this exam should be familiar with both Azure administration and development and must be expert in at least one of these areas.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**AZ-400T00: Designing and Implementing Microsoft DevOps Solutions**

⊙ **Review Study Guide for Exam AZ-400**

# Exam Prep session for Exam AZ-303

## Microsoft Azure Architect Technologies

### Session details

This Exam Prep session provides practical details on how best to prepare for E**xam AZ-303: Microsoft Azure Architect Technologies**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-303**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-303: Microsoft Azure Architect Technologies

**Exam AZ-303** **is required to earn the** Azure Solutions Architect Expert certification.

This exam measures the ability to accomplish the following technical tasks: implement and monitor an Azure infrastructure; implement management and security solutions; implement solutions for apps; and implement and manage data platforms.

Candidates for this exam should have advanced experience and knowledge of IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platform, budgeting, and governance. In addition, candidates should have expert-level skills in Azure administration and have experience with Azure development and DevOps processes.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking either of these courses:

AZ-303T00: Microsoft Azure Architect Technologies
AZ-030T00: Microsoft Azure Technologies for AWS Architects**\***

(→) Review Study Guide for Exam AZ-303

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(↑) **Back to training journey for developers**

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# Exam Prep session for Exam AZ-304

## Microsoft Azure Architect Design

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AZ-304: Microsoft Azure Architect Design**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-304**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-304: Microsoft Azure Architect Design

**Exam AZ-304 is required to earn the Azure Solutions Architect Expert certification.**

This exam measures the ability to accomplish the following technical tasks: design monitoring, design identity and security, design data storage, design business continuity, and design infrastructure.

Candidates for this exam should have advanced experience and knowledge of IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platform, budgeting, and governance. In addition, candidates should have expert-level skills in Azure administration and have experience with Azure development and DevOps processes.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

AZ-304T00: Microsoft Azure Architect Design

(→) Review Study Guide for Exam AZ-304

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(↑) Back to training journey for developers

(→) Book this session in the LxP

# Exam Prep session for Exam AZ-204

## Developing Solutions for Microsoft Azure

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AZ-204: Developing Solutions for Microsoft Azure**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AZ-204,** along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AZ-204: Developing Solutions for Microsoft Azure

**Exam AZ-204 is required to earn the Azure Developer Associate certification.**

This exam measures the ability to accomplish the following technical tasks: develop Azure compute solutions; develop for Azure storage; implement Azure security; monitor, troubleshoot, and optimize Azure solutions; and connect to and consume Azure services and third-party services.

Candidates for this exam should have one to two years of professional development experience and experience with Azure. In addition, they need the ability to program in a language supported by Azure. Plus, they should have proficiency in Azure SDKs, Azure PowerShell, Azure CLI, data storage options, data connections, APIs, app authentication and authorization, compute and container deployment, debugging, performance tuning, and monitoring.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking either of these courses:

**AZ-204T00: Developing Solutions for Microsoft Azure**
**AZ-020T00 Microsoft Azure solutions for AWS developers***

→ **Review Study Guide for Exam AZ-204**

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# Exam Prep session for Exam DP-300

## Administering Relational Databases on Microsoft Azure

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam DP-300: Administering Relational Databases on Microsoft Azure**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam DP-300**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam DP-300: Administering Relational Databases on Microsoft Azure

**Exam DP-300 is required to earn the Azure Database Administrator Associate certification.**

This exam measures the ability to accomplish the following technical tasks: plan and implement data platform resources, implement a secure environment, monitor and optimize operational resources, optimize query performance, perform automation of tasks, plan and implement a high availability and disaster recovery (HADR) environment, and perform administration by using T-SQL.

Candidates for this exam should be data management specialists with subject matter expertise implementing and managing cloud and on-premises relational databases built on top of Microsoft SQL Server and Azure data services. They should have experience using a variety of methods and tools to perform day-to-day operations, including applying knowledge of using T-SQL.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**DP-300T00 Administering Relational Databases on Microsoft Azure**

⊕ **Review Study Guide for Exam DP-300**

⊕ **Back to training journey for data & AI pros**          ⊕ **Book this session in the LxP**

# Exam Prep session for Exam DP-203

## Data Engineering on Microsoft Azure

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam DP-203: Data Engineering on Microsoft Azure.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam DP-203**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam DP-203: Data Engineering on Microsoft Azure

**Exam DP-203 is required to earn the Azure Data Engineer Associate certification.**

This exam measures the ability to accomplish the following technical tasks: design and implement data storage; design and develop data processing; design and implement data security; and monitor and optimize data storage and data processing.

Candidates for this exam should have knowledge and experience in data processing languages, such as SQL, Python, or Scala, and they need to understand parallel processing and data architecture patterns.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**DP-203T00: Data Engineering on Microsoft Azure**

→ **Review Study Guide for Exam DP-203**

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# Exam Prep session for Exam AI-102

## Designing and Implementing a Microsoft Azure AI Solution

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AI-102: Designing and Implementing a Microsoft Azure AI Solution.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AI-102**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AI-102: Designing and Implementing a Microsoft Azure AI Solution

**Exam AI-102** **is required to earn the** Azure AI Engineer Associate certification.

This exam measures the ability to accomplish the following technical tasks: plan and manage an Azure Cognitive Services solution; and implement solutions with computer vision, natural language processing, knowledge mining, and conversational AI.

Candidates for this exam should be proficient in C#, Python, or JavaScript and they should be able to use REST-based APIs and SDKs to build computer vision, natural language processing, knowledge mining, and conversational AI solutions on Azure. Candidates should also understand the components that make up the Azure AI portfolio and the available data storage options. Plus, they need to understand and be able to apply responsible AI principles.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**AI-102T00: Designing and Implementing an Azure AI Solution**

⊙ **Review Study Guide for Exam AI-102**

⊙ **Back to training journey for data & AI pros**

⊙ **Back to training journey for developers**

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# Exam Prep session for Exam DP-100

## Designing and Implementing a Data Science Solution on Azure

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam DP-100: Designing and Implementing a Data Science Solution on Azure**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam DP-100**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam DP-100: Designing and Implementing a Data Science Solution on Azure

**Exam DP-100** is required to earn the Azure Data Scientist Associate certification.

This exam measures the ability to accomplish the following technical tasks: set up an Azure Machine Learning workspace, run experiments and train models, optimize and manage models, and deploy and consume models.

Candidates for this exam should have knowledge and experience in data science and using Azure Machine Learning.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking these courses:

DP-100T01: Designing and Implementing a Data Science Solution on Azure
DP-090T00: Implementing a Machine Learning Solution with Microsoft Azure Databricks

→ Review Study Guide for Exam DP-100

# Exam Prep session for Exam DA-100

## Analyzing Data with Microsoft Power BI

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam DA-100: Analyzing Data with Microsoft Power BI**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam DA-100**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam DA-100: Analyzing Data with Microsoft Power BI

**Exam DA-100** is required to earn the **Data Analyst Associate certification**.

This exam measures the ability to accomplish the following technical tasks: prepare the data; model the data; visualize the data; analyze the data; and deploy and maintain deliverables.

Candidates for this exam need a fundamental understanding of data repositories and data processing in the cloud and in on-premises settings. In addition, they should have knowledge and experience with Power BI.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**DA-100T00: Analyzing Data with Power BI**

⊙ **Review Study Guide for Exam DA-100**

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# Exam Prep session for Exam DP-900

## Microsoft Azure Data Fundamentals

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam DP-900: Microsoft Azure Data Fundamentals**. In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam DP-900**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam DP-900: Microsoft Azure Data Fundamentals

**Exam DP-900 is required to earn the Azure Data Fundamentals certification**.

This exam measures the ability to accomplish the following technical tasks: describe core data concepts, describe how to work with relational and non-relational data on Azure, and describe an analytics workload on Azure.

Candidates for this exam should be familiar with the concepts of relational and non-relational data and with different types of data workloads, such as transactional or analytical.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**DP-900T00: Microsoft Azure Data Fundamentals**

→ **Review Study Guide for Exam DP-900**

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⬆ **Back to training journey for data & AI pros**

⬆ **Back to training journey for developers**

→ **Book this session in the LxP**

# Exam Prep session for Exam AI-900

## Microsoft Azure AI Fundamentals

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam AI-900: Microsoft Azure AI Fundamentals.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam AI-900**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam AI-900: Microsoft Azure AI Fundamentals

**Exam AI-900** is required to earn the Azure AI Fundamentals certification.

This exam measures the ability to accomplish the following technical tasks: describe AI workloads and considerations, fundamental principles of machine learning on Azure, features of computer vision workloads on Azure, and features of conversational AI workloads on Azure.

Candidates for this exam should be able to demonstrate knowledge of common machine learning and artificial intelligence workloads and how to implement them on Azure.

### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

AI-900T00: Microsoft Azure AI Fundamentals

(→) Review Study Guide for Exam AI-900

# Exam Prep session for Exam PL-400
## Microsoft Power Platform Developer

### Session details

This Exam Prep session provides practical details on how best to prepare for **Exam PL-400: Microsoft Power Platform Developer.** In the digital session that usually lasts three to four hours, the instructor helps to identify the key knowledge requirements for **Exam PL-400**, along with its objective domains, and offers suggestions on how to allocate the study time to cover them. Students learn tips for approaching exam questions and explore how to interpret them. They also get details on the various question formats and check out the scoring methodology. The Exam Prep session includes a moderated chat for live Q&A.

### About Exam PL-400: Microsoft Power Platform Developer

**Exam PL-400** is required to earn the Power Platform Developer Associate certification.

This exam measures the ability to accomplish the following technical tasks: create a technical design, configure Common Data Service, create and configure Power Apps, configure business process automation, extend the user experience, extend the platform, and develop integrations.

Candidates for this exam need knowledge and experience designing, developing, securing, and extending Microsoft Power Platform solutions. Plus, they must be able to create components of a solution that include application enhancements, custom user experience, system integrations, data conversions, custom process automation, and custom visualizations.
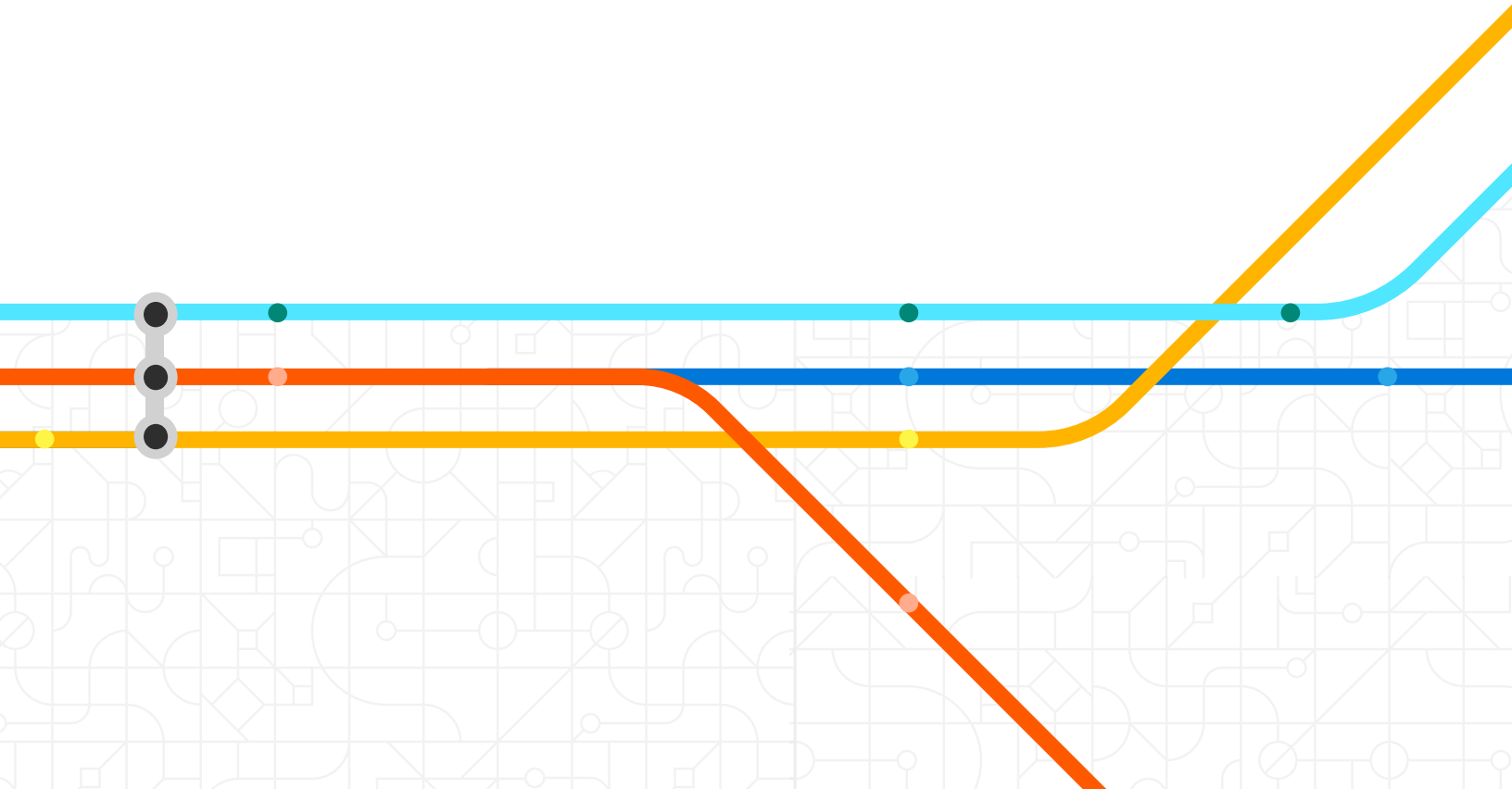
### Related instructor-led training

Learners can attend the Exam Prep session before or after taking this course:

**PL-400T00: Microsoft Power Platform Developer**

(→) **Review Study Guide for Exam PL-400**

# Microsoft Virtual Training Day events

# Microsoft Virtual Training Day events

These are in-depth, virtual training events that guide you toward the many possibilities for career and organizational impact today and tomorrow. With weekly events to match every skill level, they offer an opportunity to grow your technical skills and to gain the confidence to navigate what's ahead.

Our events cover a range of technical topics for Microsoft Azure, Microsoft 365, Dynamics 365, Microsoft Power Platform, and Security.

## Microsoft Azure Virtual Training Day

- Azure Fundamentals
- Azure AI Fundamentals
- Azure Data Fundamentals
- DevOps with GitHub
- Migrating On-Premises Infrastructure and Data
- Modernize .NET Apps
- Linux OSS Database Migration
- Implementing Hybrid Infrastructure
- Deliver Integrated Analytics with Azure Synapse

## Microsoft 365 Virtual Training Day

- Enable Remote Work with Microsoft Teams
- Building Microsoft Teams Integrations and Workflows

## Microsoft Security Virtual Training Day

- Secure and Protect Your Organization
- Protect Sensitive Information and Manage Data Risk
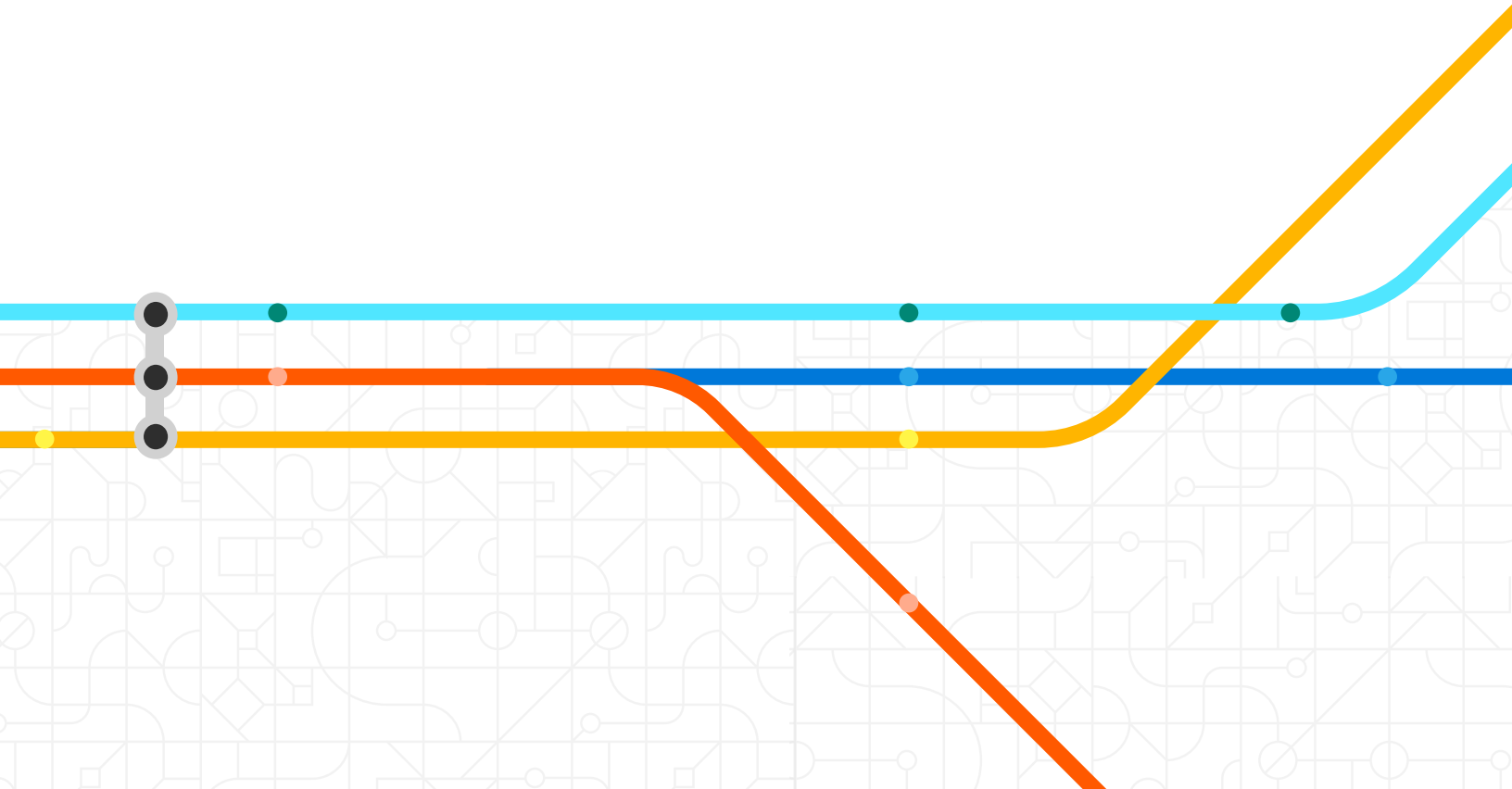
## Microsoft Dynamics 365 Virtual Training Day

- Build a Resilient Supply Chain
- Activate Digital Selling

## Microsoft Power Platform Virtual Training Day

- Microsoft Power Platform Fundamentals
- App Maker

⊙ **Find and register for Microsoft Virtual Training Days in the Learner Experience Portal (LxP)**

# A clear path to achieve cloud value on your terms

# A clear path to achieve cloud value on your terms

Whether you're just starting out on your cloud journey or looking to maximize the business value of your existing cloud investments, make the most of the industry best practices and technical guidance in the Azure documentation we've compiled. These resources were created with the help of insight from engineers, customers, and partners who shared their real-world experience.

## Microsoft Cloud Adoption Framework for Azure

Explore guidance and tools for implementing business and technology strategies and best practices for cloud adoption.

→ **Go to the Microsoft Cloud Adoption Framework for Azure**

## Microsoft Azure Well-Architected Framework

Get guiding tenets to improve the quality of workloads, including the five pillars of architecture excellence: Cost Optimization, Operational Excellence, Performance Efficiency, Reliability, and Security.
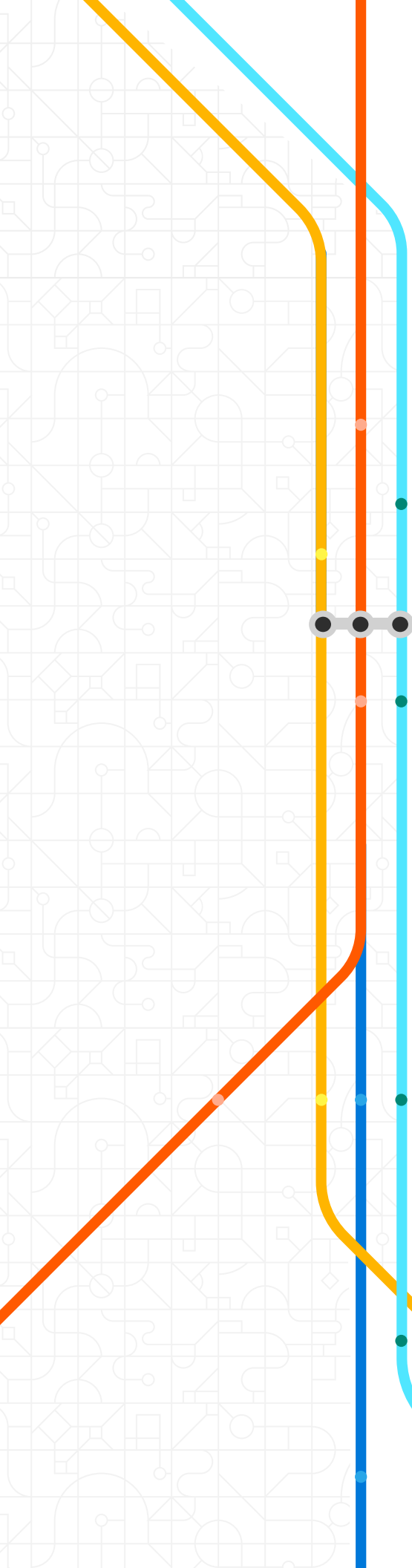
→ **Go to the Microsoft Well-Architected Framework**

→ **Check out the Microsoft Learn Azure Well-Architected Framework learning path**

## Channel 9 *Azure Enablement* show

Discover this collection of technical conversations with a community of Microsoft experts who address common questions and challenges you might encounter in your cloud adoption journey.

→ **Go to the *Azure Enablement* show**

# Enterprise Skills Initiative