

AZ-305T00: Designing Microsoft Azure Infrastructure Solutions

Category: Cloud Platforms | **Vendor:** Microsoft

Duration: 32.00 hours (4 days)

26.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Microsoft Certified: Azure Solutions Architect Expert
Related Exam:	AZ-305

Course Overview

This course teaches Azure Solution Architects how to design infrastructure solutions. Course topics cover governance, compute, application architecture, storage, data integration, authentication, networks, business continuity, and migrations. The course combines lecture with case studies to demonstrate basic architect design principles.

About This Course

This course teaches Azure Solution Architects how to design infrastructure solutions. Course topics cover governance, compute, application architecture, storage, data integration, authentication, networks, business continuity, and migrations. The course combines lecture with case studies to demonstrate basic architect design principles.

Who Should Attend

Successful students have experience and knowledge in IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platforms, and governance. Students also have experience designing and architecting solutions.

Before attending this course, students must have previous experience deploying or administering Azure resources and strong conceptual knowledge of:

- Azure compute technologies such as VMs, containers and serverless solutions
- Azure virtual networking to include load balancers
- Azure Storage technologies (unstructured and databases)
- General application design concepts such as messaging and high availability

Prerequisites & Entry Requirements

General Prerequisites:

Before attending this course, students must have previous experience deploying or administering Azure resources and conceptual knowledge of:

- Azure Active Directory
- Azure compute technologies such as VMs, containers and serverless solutions
- Azure virtual networking to include load balancers
- Azure Storage technologies (unstructured and databases)
- General application design concepts such as messaging and high availability
- [AZ-104T00 - Microsoft Azure Administrator](#)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

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[illegible]

Detailed Course Outline

1 - Design governance

- Design for governance
- Design for management groups
- Design for subscriptions
- Design for resource groups
- Design for resource tags
- Design for Azure Policy
- Design for role-based access control (RBAC)
- Design for Azure landing zones

2 - Design an Azure compute solution

- Choose an Azure compute service
- Design for Azure Virtual Machines solutions
- Design for Azure Batch solutions
- Design for Azure App Service solutions
- Design for Azure Container Instances solutions
- Design for Azure Kubernetes Service solutions
- Design for Azure Functions solutions
- Design for Azure Logic Apps solutions

3 - Design a data storage solution for non-relational data

- Design for data storage
- Design for Azure storage accounts
- Design for data redundancy
- Design for Azure Blob Storage
- Design for Azure Files
- Design for Azure managed disks
- Design for storage security

4 - Design a data storage solution for relational data

- Design for Azure SQL Database
- Design for Azure SQL Managed Instance
- Design for SQL Server on Azure Virtual Machines
- Recommend a solution for database scalability
- Recommend a solution for database availability
- Design security for data at rest, data in motion, and data in use
- Design for Azure SQL Edge
- Design for Azure Cosmos DB and Table Storage

5 - Design data integration

- Design a data integration solution with Azure Data Factory
- Design a data integration solution with Azure Data Lake
- Design a data integration and analytic solution with Azure Databricks
- Design a data integration and analytic solution with Azure Synapse Analytics
- Design strategies for hot, warm, and cold data paths
- Design an Azure Stream Analytics solution for data analysis

6 - Design an application architecture

- Describe message and event scenarios
- Design a messaging solution
- Design an Azure Event Hubs messaging solution
- Design an event-driven solution
- Design a caching solution
- Design API integration
- Design an automated app deployment solution
- Design an app configuration management solution

7 - Design authentication and authorization solutions

- Design for identity and access management (IAM)
- Design for Microsoft Entra ID
- Design for Microsoft Entra business-to-business (B2B)
- Design for Azure Active Directory B2C (business-to-customer)
- Design for conditional access
- Design for identity protection
- Design for access reviews
- Design service principals for applications
- Design managed identities
- Design for Azure Key Vault

8 - Design a solution to log and monitor Azure resources

- Design for Azure Monitor data sources
- Design for Azure Monitor Logs (Log Analytics) workspaces
- Design for Azure Workbooks and Azure insights
- Design for Azure Data Explorer

9 - Design network solutions

- Recommend a network architecture solution based on workload requirements
- Design patterns for Azure network connectivity services
- Design outbound connectivity and routing
- Design for on-premises connectivity to Azure Virtual Network
- Choose an application delivery service
- Design for application delivery services
- Design for application protection services

10 - Design a solution for backup and disaster recovery

- Design for backup and recovery
- Design for Azure Backup
- Design for Azure blob backup and recovery
- Design for Azure files backup and recovery
- Design for Azure virtual machine backup and recovery
- Design for Azure SQL backup and recovery
- Design for Azure Site Recovery

11 - Design migrations

- Evaluate migration with the Cloud Adoption Framework
- Describe the Azure migration framework
- Assess your on-premises workloads
- Select a migration tool
- Migrate your structured data in databases
- Select an online storage migration tool for unstructured data
- Migrate offline data

12 - Introduction to the Microsoft Azure Well-Architected Framework

- Azure Well-Architected Framework pillars
- Cost optimization
- Operational excellence
- Performance efficiency
- Reliability
- Security

13 - Microsoft Azure Well-Architected Framework - Cost Optimization

- Develop cost-management discipline
- Design with a cost-efficiency mindset
- Design for usage optimization
- Design for rate optimization
- Monitor and optimize over time

14 - Microsoft Azure Well-Architected Framework - Operational excellence

- Embrace DevOps culture
- Establish development standards
- Evolve operations with observability
- Deploy with confidence
- Automate for efficiency
- Adopt safe deployment practices

15 - Microsoft Azure Well-Architected Framework - Performance efficiency

- Negotiate realistic performance targets
- Design to meet capacity requirements
- Achieve and sustain performance
- Improve efficiency through optimization

16 - Microsoft Azure Well-Architected Framework - Reliability

- Design for business requirements
- Design for resilience
- Design for recovery
- Design for operations
- Keep it simple

17 - Microsoft Azure Well-Architected Framework - Security

- Plan your security readiness
- Design to protect confidentiality
- Design to protect integrity
- Design to protect availability
- Sustain and evolve your security posture

18 - Getting started with the Microsoft Cloud Adoption Framework for Azure

- Customer narrative
- Common blockers

19 - Prepare for successful cloud adoption with a well-defined strategy

- Customer narrative
- Capture strategic motivation
- Define objectives and key results
- Evaluate financial considerations
- Understand technical considerations
- Create a business case

20 - Prepare for cloud adoption with a data-driven plan

- Customer narrative

21 - Choose the best Azure landing zone to support your requirements for cloud operations

- Customer narrative
- Common operating models
- Design areas for Azure landing zones
- Design principles for Azure landing zones
- Journey to the target architecture
- Choose an Azure landing zone option
- Deploy the Azure landing zone accelerator
- Enhance your landing zone

22 - Migrate to Azure through repeatable processes and common tools

- Customer narrative
- Migration process
- Migration tools
- Common tech platforms

23 - Address tangible risks with the Govern methodology of the Cloud Adoption Framework for Azure

- Customer narrative
- Govern methodology
- Corporate policies
- Governance disciplines
- Deploy a cloud governance foundation
- The Cost Management discipline

24 - Ensure stable operations and optimization across all supported workloads deployed to the cloud

- Establish business commitments
- Deploy an operations baseline
- Protect and recover
- Enhance an operations baseline
- Manage platform and workload specialization

25 - Innovate applications by using Azure cloud technologies

- Follow the innovation lifecycle
- Azure technologies for the build process
- Infuse your applications with AI
- Azure technologies for measuring business impact
- Azure technologies for the learn process

26 - Prepare for cloud security by using the Microsoft Cloud Adoption Framework for Azure

- Customer narrative
- Methodology
- Security roles and responsibilities
- Simplify compliance and security
- Simplify security implementation
- Security tools and policies

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1 - Describe the core architectural components of Azure

- What is Microsoft Azure
- Get started with Azure accounts
- Describe Azure physical infrastructure
- Describe Azure management infrastructure
- Module assessment

2 - Describe Azure compute and networking services

- Describe Azure virtual machines
- Describe Azure virtual desktop
- Describe Azure containers
- Describe Azure functions
- Describe application hosting options
- Describe Azure virtual networking
- Describe Azure virtual private networks
- Describe Azure ExpressRoute
- Describe Azure DNS
- Module assessment

3 - Describe Azure storage services

- Describe Azure storage accounts
- Describe Azure storage redundancy
- Describe Azure storage services
- Identify Azure data migration options
- Identify Azure file movement options
- Module assessment

4 - Describe Azure identity, access, and security

- Describe Azure directory services
- Describe Azure authentication methods
- Describe Azure external identities
- Describe Azure conditional access
- Describe Azure role-based access control
- Describe Zero Trust model
- Describe defense-in-depth
- Describe Microsoft Defender for Cloud
- Module assessment

5 - Introduction to the Microsoft Cloud Adoption Framework

- Strategy
- Plan
- Ready
- Migrate
- Modernize
- Cloud-native
- Govern
- Manage
- Secure
- Module assessment

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10 - Describe high availability and disaster recovery strategies

- Describe recovery time objective and recovery point objective
- Explore high availability and disaster recovery options
- Describe Azure high availability and disaster recovery features for Azure Virtual Machines
- Describe high availability and disaster recovery for PaaS deployments
- Explore high availability and disaster recovery solution for IaaS
- Describe hybrid solutions
- Module assessment

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Certification Path

Microsoft Certified: Azure Solutions Architect Expert

Exam: AZ-305

Upcoming Schedule

Available training dates for AZ-305T00: Designing Microsoft Azure Infrastructure Solutions:

Start Date	End Date	Location	Delivery	Price
08 Sep 2026	11 Sep 2026	Online	Virtual	€2,495.00
07 Dec 2026	10 Dec 2026	Online	Virtual	€2,495.00
19 Jan 2027	22 Jan 2027	Virtual Classroom - Zoom Link will be sent to you 7 days before the co	Virtual	€1,980.00
13 Apr 2027	16 Apr 2027	Virtual Classroom - Zoom Link will be sent to you 7 days before the co	Virtual	€1,980.00
13 Jul 2027	16 Jul 2027	Virtual Classroom - Zoom Link will be sent to you 7 days before the co	Virtual	€1,980.00
07 Dec 2027	10 Dec 2027	Virtual Classroom - Zoom Link will be sent to you 7 days before the co	Virtual	€1,980.00

Additional Course Details

Nexus Humans AZ-305 Designing Microsoft Azure Infrastructure Solutions training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the AZ-305 Designing Microsoft Azure Infrastructure Solutions course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for AZ-305T00: Designing Microsoft Azure Infrastructure Solutions?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: What certification does this course prepare me for?

The AZ-305T00: Designing Microsoft Azure Infrastructure Solutions course helps prepare you for the Microsoft Certified: Azure Solutions Architect Expert certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AZ-305 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 4-day AZ-305T00: Designing Microsoft Azure Infrastructure Solutions course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AZ-305T00: Designing Microsoft Azure Infrastructure Solutions training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AZ-305T00: Designing Microsoft Azure Infrastructure Solutions?

Yes, we provide corporate training, dedicated training, and closed classes for AZ-305T00: Designing Microsoft Azure Infrastructure Solutions. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: az305 az304 az303 az300 az-303 az-304 az-300 az 305 az 304 az 303 az 300 az-303 az-304 az-300, AZ-305T00: Design Microsoft Azure Infrastructure Solutions, Microsoft, vILT, AZ-305T00

Q: Why choose Nexus Human for AZ-305T00: Designing Microsoft Azure Infrastructure Solutions?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
 - National Training Partner of the Year (Ireland) - Multiple Years
 - Global Top 30 Instructor Awards (2012, 2019, 2021)
 - Tech Excellence Award Nominations
 - Learning Performance Institute (LPI) External Training Provider Sponsor 2024
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Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AZ-305T00: Designing Microsoft Azure Infrastructure Solutions training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

✉ Email: info@nexushuman.com

🌐 Website: www.nexushuman.com



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