

## Solution Architect

Looking to develop your Microsoft Azure knowledge and skills? You're on the right path!



This Azure learning journey is designed for [Solution Architects](#) defining the design and implementation of technology solutions in Microsoft Azure. Using the understanding of an organization's business requirements and developer capabilities, these IT professionals use building blocks of different technology components to create robust, optimized architectures.

This guide maps out your itinerary for deepening your Azure knowledge, drawing on a wide array of Microsoft resources. You'll begin by diving into the fundamental concepts of Microsoft Azure, explore core solutions, then move on to solution design principles,

including security and compliance. Finally, you'll discover deployment tools and methods to help bring your solution architectures to life. These modules are designed to be completed in order, step by step, as outlined in this guide.

Travel at your own pace—and then continue your Azure exploration with ongoing learning opportunities, including further training, blog updates, videos, events, and connecting with technical communities. Take the first step toward your Azure destination today.

# Learning topics

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- 4 Explore Azure solutions
- 6 Discover solution design principles
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- 9 Deploy your Azure solution
- 10 Continue your learning



## Start with the fundamentals of Microsoft Azure

In this section, you'll learn about the foundational concepts of cloud computing and gain an overview of Azure services.



### [Microsoft Azure fundamentals](#)

In this free six-part series, you'll explore basic cloud concepts, gain an overview of many Azure services, and participate in hands-on exercises to deploy your very first services.

9 HRS.

SELF-PACED LEARNING

Within this learning path, the self-learning modules that are most important for the **Solution Architect** role include:

### [Fundamental Azure concepts](#)

Explore the different types of cloud computing and the advantages of using cloud computing services.

25 MINS.

SELF-PACED LEARNING

### [Core Azure architectural components](#)

Discover the core concepts, resources, and terminology you need to work with Azure services.

30 MINS.

SELF-PACED LEARNING

### [Azure cost management and service level agreements \(SLAs\)](#)

Learn about the factors that influence cost, tools for estimating and managing your cloud spend, and how Azure's SLAs can influence your design decisions.

1 HOUR  
10 MINS.

SELF-PACED LEARNING

### [Privacy, compliance and data protection standards](#)

Explore Microsoft's commitment to privacy and how Azure adheres to common regulatory and compliance standards.

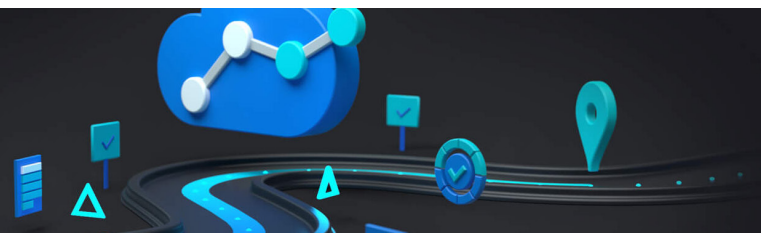
30 MINS.

SELF-PACED LEARNING

### [Microsoft Certified: Azure Fundamentals](#)

Demonstrate your knowledge of cloud concepts and Azure services, workloads, security, privacy, pricing, and support.

CERTIFICATION



## Explore Azure solutions

Azure offers a wide variety of services, but most organizations will start with those related to identity, compute, networking, storage, and data. Learn about these foundational services, as well as process automation, containers, AI, and Internet of Things (IoT).

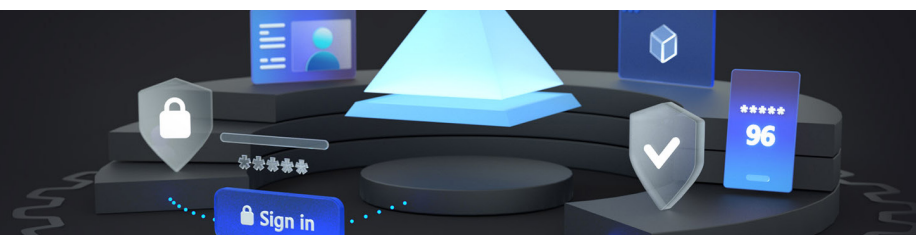


<a href="#">Azure Active Directory</a>	Gain an overview of the Azure Active Directory identity service, which manages access to Microsoft 365, Azure, and more.	10 MINS.	ARTICLE
<a href="#">Design authentication and authorization solutions</a>	Explore the services available for internal and external identity and access management, including identity protection capabilities.	40 MINS.	SELF-PACED LEARNING
<a href="#">Implement Microsoft identity</a>	Find out how to utilize Microsoft identity in your custom applications, including the OAuth 2.0 protocol and custom APIs.	6 HOURS	SELF-PACED LEARNING
<a href="#">Virtual machines in Azure</a>	Explore the available sizes and options for Windows and Linux virtual machines in Azure.	10 MINS.	ARTICLE
<a href="#">Azure networking services overview</a>	Increase your knowledge about the key capabilities of Azure networking services.	10 MINS.	ARTICLE
<a href="#">Azure networking</a>	Dive deeper into technical demonstrations of specific Azure networking capabilities, including Virtual WAN, load balancing, and hybrid connectivity.		VIDEOS
<a href="#">Design infrastructure solutions</a>	Learn how to design and recommend compute solutions, application architecture, network solutions, and migrations to Azure.	2 HOURS	SELF-PACED LEARNING





<a href="#">Design data storage solutions</a>	Discover data storage solutions for relational data, non-relational data, and data integration.	1.5 HOURS	SELF-PACED LEARNING
<a href="#">Azure Stack HCI foundations</a>	Learn about the Azure Stack portfolio and the basic architecture, core capabilities, and primary use cases.	3 HOURS	SELF-PACED LEARNING
<a href="#">Automate your business processes</a>	Learn how to choose the right Azure service for integration and process automation.	45 MINS.	SELF-PACED LEARNING
<a href="#">Administer containers in Azure</a>	Learn about Azure's container solutions, including Azure Container Instances, Azure Container Registry, Azure Kubernetes Service, and support for Docker containers.	5 HOURS	SELF-PACED LEARNING
<a href="#">AI strategy and solutions</a>	Understand Azure's tools and services for AI and machine learning.	1 HOUR	SELF-PACED LEARNING
<a href="#">Azure IoT</a>	Explore Azure's solutions for IoT devices.	3 MINS.	ARTICLE



## Discover solution design principles

Now that you know more about Azure services, increase your knowledge of relevant solution design principles. In this section, you'll find case studies, architecture frameworks, design approaches, and more.



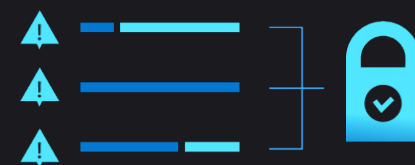
<a href="#">Azure case studies</a>	Get inspired by real customer examples of Azure capabilities in action.		CASE STUDIES
<a href="#">Azure Cloud Adoption Framework</a>	Learn how to plan and implement business and technology strategies in the cloud.	30 MINS.	ARTICLE
<a href="#">Azure Well-Architected Framework</a>	Discover principles for architecting high-quality, stable, and efficient cloud workloads.	40 MINS.	ARTICLE
<a href="#">Well-Architected: The Backstage Tour</a>	Go behind the scenes of Azure to learn how we power reliability, security, cost optimization, operational excellence, and performance efficiency.	1.5 HOURS	VIDEOS
<a href="#">Azure Architecture Center</a>	Explore best practices and patterns for building applications on Microsoft Azure and across Microsoft cloud platforms.		RESOURCES
<a href="#">Azure application architecture fundamentals</a>	Study a structured approach for designing applications on Azure that are scalable, secure, resilient, and highly available.	5 MINS.	ARTICLE
<a href="#">Cloud design patterns</a>	Discover design patterns useful for building reliable, secure applications in the cloud.	5 MINS.	ARTICLE
<a href="#">Design principles for Azure applications</a>	Explore the 10 design principles to make your Azure applications scalable, resilient, and manageable.	2 MINS.	ARTICLE
<a href="#">Design an application architecture</a>	Learn more about designing and recommending application architectures, including messaging and event-driven scenarios.	30 MINS.	SELF-PACED LEARNING







<a href="#">Design for high availability and business continuity</a>	Explore solutions for high availability, backup, and disaster recovery.	1 HOUR	SELF-PACED LEARNING
<a href="#">Availability options for Azure VMs</a>	Find out how to design solutions using replicated VMs in zones to protect your apps and data from the loss of a datacenter.	5 MINS.	ARTICLE
<a href="#">Azure reference architectures</a>	Browse architecture diagrams and technology descriptions for reference architectures, real-world examples of cloud architectures, and solution ideas for common workloads on Azure.		DIAGRAMS
<a href="#">Cost management best practices</a>	Explore this methodical approach to cost management, with tools and principles to optimize your investment in Azure.	10 MINS.	ARTICLE
<a href="#">Azure pricing calculator</a>	Calculate estimated costs for your Azure solutions.		TOOL
<a href="#">Azure Total Cost of Ownership (TCO) calculator</a>	Estimate the cost savings of migrating workloads to Azure.		TOOL
<a href="#">Microsoft Certified: Azure Solutions Architect Expert</a>	Demonstrate your knowledge of designing cloud and hybrid solutions that run on Microsoft Azure, including compute, network, storage, monitoring, and security.		CERTIFICATION

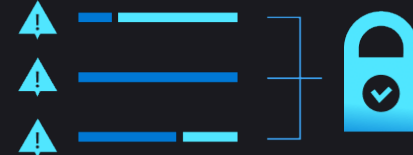


## Plan security and compliance

Learn about the security and compliance capabilities of Azure, from best practices and benchmarks to strategies and resources.



<a href="#">Describe the capabilities of Microsoft's security solutions</a>	Find out about Security, Identity, and Compliance fundamentals of Azure, as well as security tools in Azure and Microsoft 365.	1 HOUR 40 MINS.	SELF-PACED LEARNING
<a href="#">Microsoft Cybersecurity Reference Architecture</a>	Browse reference architecture diagrams that describe how Microsoft security capabilities integrate with both Microsoft platforms and third-party platforms and apps.	5 MINS.	ARTICLE
<a href="#">Security best practices for Azure solutions</a>	Explore security best practices to use when you're designing, deploying, and managing your Azure cloud resources.	50 MINS.	WHITE PAPER
<a href="#">Azure Security Benchmark introduction</a>	Discover recommendations for quickly reducing your organization's security risks.	10 MINS.	ARTICLE
<a href="#">Build a cloud governance strategy</a>	Learn how to make organizational decisions about your cloud environment's configuration and enforce them with Azure's governance features and services.	50 MINS.	SELF-PACED LEARNING
<a href="#">Microsoft Trust Center</a>	Find comprehensive resources explaining Microsoft's approach to privacy and compliance.		RESOURCES
<a href="#">Managing compliance in the cloud</a>	Explore resources for compliance practitioners, including regional and industry regulations.		RESOURCES
<a href="#">Microsoft Security resources</a>	Learn how to build Zero Trust security principles into your solutions across devices, identities, applications, and data.		RESOURCES
<a href="#">Microsoft Security</a>	Explore technical demonstrations of Microsoft's security, compliance, and identity and access management capabilities.		VIDEOS



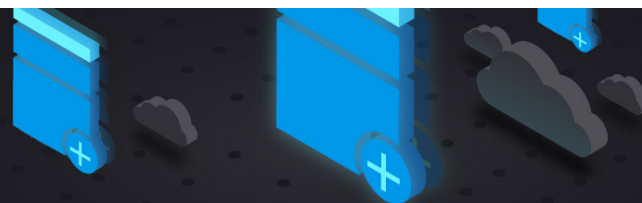


## Deploy your Azure solution

Consider how your solution will be deployed and maintained with Azure tools, processes, and templates.



<a href="#">Get started with Azure PowerShell</a>	Learn the core PowerShell commands for Azure and try them in your own Azure environment.	5 MINS.	INTERACTIVE LEARNING
<a href="#">Fundamentals of Bicep</a>	Try out Azure's Bicep language for deploying infrastructure-as-code.	3 HRS	SELF-PACED LEARNING
<a href="#">All around Azure: DevOps with GitHub</a>	Learn about DevOps principles such as source control, continuous integration, and continuous delivery with Azure DevOps and GitHub.	1.5 HOURS	VIDEOS
<a href="#">Get started with Azure DevOps</a>	Discover how you can build, test, and deploy any application, either to the cloud or on premises, with Azure DevOps.	2 HRS	SELF-PACED LEARNING
<a href="#">Azure landing zones</a>	Find out how to deploy conceptual Azure architectures as code.	5 MINS.	ARTICLE
<a href="#">Azure Quickstart templates</a>	Browse community-contributed templates to help you quickly deploy Azure resources	5 MINS.	TEMPLATES
<a href="#">Azure Migrate</a>	Gain an overview of Azure's centralized hub for assessing and migrating on-premises servers, infrastructure, applications, and data to Azure.	5 MINS.	ARTICLE





### Trial



#### [Free Azure Trial](#)

Get started with \$200 of Azure credit for 30 days, popular services free for 12 months, and more than 40 services that are always free.

[AZURE FREE ACCOUNT](#)

### Training



#### [Microsoft Learn](#)

The place to share your learning experiences and get the latest updates related to training and certification.

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[CLASSROOM TRAINING](#)

### Blogs



#### [Microsoft Azure blog](#)

The latest news and announcements direct from Azure product teams.

[BLOG](#)

#### [Azure DevOps blog](#)

DevOps, Git, and Agile updates from the team building Azure DevOps.

[BLOG](#)

### Documentation



#### [Azure documentation](#)

Learn how to build and manage powerful infrastructure and applications using Microsoft Azure cloud services. Get documentation, example code, tutorials, and more.

[RESOURCES](#)

#### [Azure updates](#)

Stay informed on the latest product features.

[RESOURCES](#)

### Stay connected



#### [Microsoft events](#)

Special events and virtual training days to help you expand your expertise, learn new skills, and build community.

[EVENTS](#)

#### [Azure community](#)

Your community for best practices and the latest news on Azure.

[FORUMS](#)