Azure Developer Learning Pathway (1/2)

www.aka.ms/pathways

Getting started

Azure Skills Navigator

Microsoft

Developers

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

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This Microsoft learning journey is designed for developers. This guide maps out your itinerary for deepening your knowledge, drawing on a wide array of Microsoft resources, divided into three phases:

Ramp up
Discover core skills and language fundamentals.

App development
Learn how to build cloud-native apps with various cloud architectures, frameworks for web, mobile apps, and relevant Azure services.

In production
Explore services for monitoring, logging, instrumentation, and authorization

Continue your foundational learning:

- Azure Fundamentals
- Data Fundamentals
- Build your Tech resilience
- Introduction to Visual Studio Code
- Introduction to Kubernetes on Azure
- Orchestrate containers for cloud-native apps with AKS
- Cloud computing basics for developers
- Get started with Azure DevOps
- Microsoft Developer Channel ▶ YouTube
- Developer LunchBytes ▶ YouTube

Role based certification
Azure Developer

AZ-204: Microsoft Azure Developer

Skills Measured:

- Develop Azure compute solutions (25-30%)
- Develop for Azure storage (15-20%)
- Implement Azure security (20-25%)
- Monitor, troubleshoot/optimize Azure solutions (15-20%)
- Connect to and consume Azure services and third-party services (15-20%)

Exam Study Guide

30 Days to Learn Challenge!

Course Page

Exam Page

Practice Test

Exam Curriculum

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 KeyVault and Managed Identities.

Certification Curriculum:

- Create Azure App Service Web Apps
- Implement Azure Functions
- Develop Solutions that use Blob Storage
- Develop Solutions that use Azure Cosmos DB
- Implement containerised solutions
- Implement user authentication and authorisation
- Implement secure Azure solutions
- Implement API management
- Develop event-based solutions
- Develop message-based solutions
- Troubleshoot solutions by using Application Insights
- Implement caching for solutions

Reinforce your learning

Microsoft Learn
- Apply and monitor infrastructure standards with Azure Policy
- Work with relational data in Azure
- Choose a data storage approach in Azure
- Work with NoSQL data in Azure Cosmos DB
- Take your first steps with Python
- Build JavaScript applications with Node.js
- Distributed programming on the cloud

Azure App Service web apps
- App Service Documentation
- Azure App Service | App Service Plan
- Create a web app and deploy code from GitHub
- Web application monitoring on Azure

CLI:
- Get started with Azure CLI
- Control Azure services with the CLI
- Manage virtual machines with the Azure CLI
- Create Azure resources by using Azure CLI
- Azure Command-Line Interface (CLI) documentation

Azure Functions:
- Introduction to Azure Functions
- Azure Functions documentation

Developer for Azure Storage:
- Azure Cosmos DB | APIs
- Quickstart: Create an Azure Cosmos DB Instance
- Partitioning
- Blob Storage

Monitoring & Logging:
- Azure Monitor | Monitor Documentation
- Enabling Application Insights
- Alerts & Rules
- Log Queries

Content Delivery Network (CDN):
- What is a content delivery network on Azure?
- Caching Fundamentals
- What is Azure Front Door (difference from CDN)
- Azure Cache for Redis Documentation

Azure Developer Learning Pathway (2/2)

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Java

Microsoft

Azure Skills Navigator

Java Skills Navigator

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There are a host of reasons why developers prefer building Java applications in Azure, from the ability to build, debug, and deploy Java applications using their favourite development environments to quickly adding services and capabilities and integrating them with other apps and services in the Microsoft partner ecosystem. And not least of all, the productivity bonus of not having to manage infrastructure during development.

This guide helps you navigate the resources and training for choosing the right service, building, and deploying, monitoring, and expanding the capabilities of Java applications on Azure.

Continue your foundational learning:

- Get started with Java on Azure ▶YouTube
- Microsoft's Java for beginners ▶YouTube
- Microsoft for Java Developers
- Java learning path
- Workshops and videos for Java developers
- Java on Azure Samples
- Cheat sheets for Java developers
- Java to Azure migration strategy documentation
- Microsoft for Java Developers
- Azure for Java developer documentation
- Azure SDK for Java documentation

Developer Resource Guide

Languages & Frameworks:
Python
- Python for beginners
- Django
- Flask
- Web Application Project Templates

JavaScript:
- JavaScript at Microsoft
- React
- jQuery
- Node.js

C#:
- .NET on Microsoft Learn
- Build .NET applications with C#

Tooling:
Visual Studio Code
- Visual Studio Code – Code Editing.
- VS Code – Latest Documentation
- Introduction to Visual Studio Code

Web Development:
- Develop Web apps with Visual Studio Code
- Blazor

App Development:
- Create a mobile app with Xamarin.Forms
- Write your first Windows application
- Introduction to Linux on Azure

Agile / DevOps
- GitHub Projects and Azure DevOps Boards
- GitHub Actions
- Terraform on Azure
- Fundamentals of Bicep
- Docker
- UI test with Selenium
- Jenkins on Azure
- Puppet
- Chef
- Ansible on Azure

Cloud Development:
- ARM Templates
- Azure Container Registry
- Azure Container Instance
- Application Insights
- Azure Functions
- Azure Cache for Redis
- Azure Event Grid
- Azure Event Hub
- Azure Service Bus
- DAPR
- Microservices
- Azure Key Vault

Resources:
- Microsoft UK Developers
- Microsoft Developer
- Sign up for the Microsoft.Source newsletter
- .NET documentation
- Azure Developer Tools

30 days to Learn it Challenge

30 Days to Learn It can help you build skills and start your preparation for Microsoft Certifications. Select your challenge below.

Java on Azure Developer

Azure Developer

Green Software Development

If you want to make your software applications more sustainable and build a career in green software, then this training is for you. It will teach you how to build, maintain and run greener applications irrespective of the application domain, industry, organization size or type, programming language, or framework.

Get Started