



MICROSOFT TRAINING

Advanced Serverless Architectures with Microsoft Azure Course Overview

Master advanced serverless architectures on Microsoft Azure. Design, deploy, and manage highly scalable and resilient cloud solutions.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

Unlock the full potential of cloud-native development with Computer Pride's Advanced Serverless Architectures with Microsoft Azure Course Overview. This intermediate-level course dives deep into designing, deploying, and managing highly scalable, cost-effective serverless solutions using Microsoft Azure's powerful ecosystem. You will explore advanced concepts beyond basic function creation, focusing on robust integration patterns, state management, security best practices, and performance optimization across Azure Functions, Logic Apps, Event Grid, and Azure Cosmos DB.

This training is meticulously designed for IT professionals seeking to elevate their expertise in building cutting-edge, event-driven applications. By mastering advanced serverless techniques, you will gain the skills to architect resilient and efficient systems that respond dynamically to business needs, significantly reducing operational overhead. Graduates will be equipped to tackle complex real-world serverless challenges, contributing to innovative cloud solutions and driving digital transformation within their organizations.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Advanced Azure Functions Patterns and State Management

- Implementing Durable Functions for complex orchestrations
- Fan-out/Fan-in patterns for parallel processing
- Managing state in serverless applications with external storage
- Best practices for long-running serverless workflows

02 Module 2: Serverless Integration and Event-Driven Architectures

- Designing event-driven solutions with Azure Event Grid and Service Bus
- Advanced integration with Logic Apps and custom connectors
- Real-time data processing with Azure Stream Analytics and serverless functions
- Building serverless APIs with Azure API Management

03 Module 3: Securing and Monitoring Serverless Applications

- Implementing identity and access management for serverless (Managed Identities)
- Network isolation for Azure Functions (VNet integration, Private Endpoints)
- Advanced logging, monitoring, and alerting with Azure Monitor and Application Insights
- Cost optimization strategies for Azure Serverless resources

04 Module 4: Serverless DevOps and Deployment Strategies

- Implementing CI/CD pipelines for serverless applications with Azure DevOps
- Automated deployments using ARM templates and Bicep
- Testing strategies for serverless functions and integrations
- Versioning and managing serverless deployments

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Cloud Solutions Architect (Azure focus)**
- > **Senior Azure Developer (Specializing in Serverless)**
- > **DevOps Engineer (Serverless CI/CD Specialist)**

FREQUENTLY ASKED QUESTIONS

Q: What are the recommended prerequisites for taking this Advanced Serverless Architectures course?

To gain the most from this advanced course, participants should have a foundational understanding of Azure services, including basic experience with Azure Functions or Logic Apps. Familiarity with cloud concepts, general programming principles (e.g., C# or Python), and RESTful APIs will also be highly beneficial.

Q: How does this course address common serverless challenges like cold starts and efficient state management?

This course specifically tackles these challenges by exploring techniques such as pre-warmed instances and Premium plans for mitigating cold starts in Azure Functions. For state management, you will learn to leverage Durable Functions for complex orchestrations and integrate with services like Azure Cosmos DB for scalable and reliable state persistence, ensuring optimal performance for your serverless applications.

Q: What unique architectural patterns will I learn to implement for highly scalable and resilient serverless solutions on Azure?

You will gain proficiency in implementing advanced patterns such as the Saga pattern for distributed transactions, reliable Fan-out/Fan-in patterns for parallel processing, and event sourcing with Azure Event Grid. The course emphasizes designing loosely coupled, event-driven architectures that maximize scalability, resilience, and maintainability in your Azure serverless deployments.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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