

Serverless Computing: AWS Lambda and Azure Functions

Barcelona (Spain)

28 June - 2 July 2027

UK Training

PARTNER



Serverless Computing: AWS Lambda and Azure Functions

Code: IT32 From: 28 June - 2 July 2027 City: Barcelona (Spain) Fees: 5900 Pound

Introduction

In today's rapidly evolving digital landscape, organizations are increasingly seeking faster, more efficient, and cost-effective ways to develop and deploy applications. Serverless computing has emerged as a transformative model that eliminates the need to manage or provision servers manually.

This approach allows developers to focus solely on writing and optimizing code, while cloud providers handle the infrastructure automatically – scaling resources on demand and ensuring high availability.

This course explores the principles and practical applications of serverless computing through AWS Lambda and Azure Functions, two of the most powerful platforms enabling automation, scalability, and efficiency in modern cloud environments. Participants will gain hands-on knowledge in designing, deploying, and managing serverless applications that deliver reliability, performance, and cost optimization.

Course Objectives

- Understand the fundamental principles of serverless computing and its business value.
- Learn how AWS Lambda and Azure Functions operate and differ in implementation.
- Build and deploy serverless applications using event-driven architecture.
- Integrate serverless functions with databases, APIs, and external services.
- Apply best practices for monitoring, scaling, and optimizing performance.
- Strengthen security through access control and data protection mechanisms.
- Reduce operational costs through automation and resource efficiency.
- Develop the ability to design multi-cloud serverless solutions for complex systems.

Course Outlines

Day 1: Introduction to Serverless Architecture

- Overview of traditional vs. serverless computing models.
- The evolution of cloud computing and the rise of serverless frameworks.
- Core characteristics of serverless applications.
- Advantages and limitations of the serverless approach.
- Understanding event-driven execution and its practical implications.
- Real-world examples of successful serverless adoption.

Day 2: Exploring AWS Lambda

- Architecture and core concepts of AWS Lambda.
- Creating, configuring, and deploying Lambda functions.
- Triggers and event sources: API Gateway, S3, DynamoDB, and more.
- Managing function versions and environment variables.



- Integrating Lambda with other AWS services for end-to-end workflows.
- Practical lab: developing and testing a complete serverless application.

Day 3: Working with Azure Functions

- Key features and capabilities of Azure Functions.
- Setting up a serverless environment in Microsoft Azure.
- Using bindings and triggers to automate workflows.
- Managing function lifecycles and configurations.
- Monitoring and troubleshooting Azure Functions.
- Practical exercise: creating an automated cloud service using Azure Functions.

Day 4: Multi-Cloud Integration and Orchestration

- Designing hybrid solutions across AWS and Azure platforms.
- Integrating APIs and data flows between cloud environments.
- Synchronizing serverless workloads for cross-platform scalability.
- Security considerations in multi-cloud serverless setups.
- Using orchestration tools for seamless deployment.
- Case study: building a multi-cloud serverless architecture.

Day 5: Security, Optimization, and Continuous Improvement

- Applying security best practices in serverless environments.
- Managing authentication and authorization securely.
- Optimizing resource usage and execution costs.
- Monitoring function performance with cloud-native tools.
- Implementing continuous integration and continuous deployment pipelines.
- Final workshop: full implementation and performance review.

Why Attend this Course: Wins & Losses!

- Gain a deep understanding of serverless computing concepts and tools.
- Build and deploy fully functional applications without managing servers.
- Enhance development speed and agility through automation.
- Reduce infrastructure costs while maintaining scalability and reliability.
- Strengthen security and compliance in cloud-native environments.
- Learn to integrate serverless services across multiple cloud providers.
- Boost collaboration between development and operations teams.
- Prepare your organization for future-ready, cloud-driven transformation.

Conclusion

Serverless computing represents a major leap forward in how organizations build, deploy, and manage applications. By leveraging AWS Lambda and Azure Functions, teams can create scalable, secure, and efficient systems without the overhead of traditional infrastructure management.





This course equips professionals with the technical and strategic skills necessary to harness the full potential of serverless technology – enabling innovation, reducing operational complexity, and accelerating digital transformation.

Head Office: +44 7480 775 526
Email: Sales@blackbird-training.com
Website: www.blackbird-training.com

UK Training
PARTNER



Blackbird Training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation
Guinea



Booking.com
Netherlands



Oxfam GB International
Organization,
Yemen



Capital Markets
Authority,
Kuwait



Waltersmith Petroman Oil Limited
Nigeria



Qatar National Bank
(QNB),
Qatar



Qatar Foundation,
Qatar



AFRICAN UNION ADVISORY
BOARD ON CORRUPTION,
Tanzania



KFAS
Kuwait



Reserve Bank of
Malawi,
Malawi



Central Bank of Nigeria
Nigeria



Ministry of Interior
Kingdom of Saudi Arabia
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



General Organization for
Social Insurance
KSA



Defence Space Administration
Nigeria



National Industries
Group (Holding),
Kuwait



Hamad Medical
Corporation,
Qatar



USAID
Pakistan



STC Solutions,
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS
UN.



Authority for

UK Training
PARTNER



Blackbird Training Categories

Management & Admin

Entertainment & Leisure
Professional Skills
Finance, Accounting, Budgeting
Media & Public Relations
Project Management
Human Resources
Audit & Quality Assurance
Marketing, Sales, Customer Service
Secretary & Admin
Supply Chain & Logistics
Management & Leadership
Agile and Elevation

Technical Courses

Artificial Intelligence (AI)
Sustainability, ESG & Corporate Responsibility
Advanced Courses
Hospital Management
Public Sector
Special Workshops
Oil & Gas Engineering
Telecom Engineering
IT & IT Engineering
Health & Safety
Law and Contract Management
Customs & Safety
Aviation
C-Suite Training

