

Cloud DevSecOps and CI/CD Pipeline Security

London (UK)

12 - 16 July 2027

UK Training

PARTNER



Cloud DevSecOps and CI/CD Pipeline Security

Code: IT32 From: 12 - 16 July 2027 City: London (UK) Fees: 6100 Pound

Introduction

In today's cloud-driven digital era, cybersecurity is no longer an isolated function – it's an integral part of the entire software development lifecycle. As organizations increasingly adopt cloud platforms and automated deployment models, integrating security within every development and operational stage has become critical.

This course provides a comprehensive understanding of how to embed security practices within cloud-based development and operational workflows. Participants will learn how to secure continuous integration and continuous delivery CI/CD pipelines against threats, ensure compliance, and maintain resilient and trustworthy systems.

Through practical sessions and case studies, learners will gain the knowledge and tools needed to design secure architectures, automate security checks, and lead teams toward a proactive security culture.

Course Objectives

- Understand the fundamental concepts of Cloud DevSecOps and its importance in modern environments.
- Identify the components and security risks within CI/CD pipelines.
- Apply best practices for integrating security into every phase of the development lifecycle.
- Implement automated security testing and compliance monitoring.
- Analyze vulnerabilities within cloud infrastructures and deployment systems.
- Build secure configurations and manage credentials safely.
- Design effective incident response and recovery strategies.
- Foster collaboration between development, security, and operations teams to achieve unified goals.

Course Outlines

Day 1: Foundations of Cloud Security and DevSecOps

- Overview of cloud security concepts and shared responsibility models.
- Introduction to DevSecOps principles and benefits.
- Comparing traditional security vs. integrated DevSecOps approaches.
- Common threats in cloud and hybrid environments.
- Secure coding fundamentals within cloud applications.
- Case studies of organizations implementing DevSecOps successfully.

Day 2: Architecture of CI/CD Pipelines

- Understanding CI/CD pipeline structures and workflows.
- Identifying critical security checkpoints across build and deployment stages.
- Integrating code review and static analysis tools.
- Managing secrets and credentials across environments.



- Implementing secure configuration management.
- Strategies for vulnerability assessment and risk mitigation.

Day 3: Automation and Security Tools

- Role of automation in improving security efficiency.
- Setting up automated scanning and compliance verification.
- Integrating container security within DevSecOps pipelines.
- Using monitoring and alerting tools for continuous visibility.
- Implementing role-based access control and identity management.
- Hands-on application of automated defense mechanisms.

Day 4: Securing Cloud Infrastructure and Applications

- Advanced strategies to protect cloud-native architectures.
- Securing APIs, databases, and microservices in the cloud.
- Network segmentation and environment isolation techniques.
- Hardening containers and virtual machines.
- Detecting and responding to misconfigurations.
- Aligning practices with global cloud security standards.

Day 5: Security Testing and Incident Response

- Conducting penetration tests within CI/CD environments.
- Validating compliance with organizational and regulatory policies.
- Interpreting and acting upon vulnerability reports.
- Building a structured incident response plan.
- Post-incident analysis and continuous improvement.
- Final workshop: connecting theoretical concepts to real-world execution.

Why Attend this Course: Wins & Losses!

- Gain a holistic understanding of cloud-based DevSecOps practices.
- Learn how to protect CI/CD pipelines from modern cyber threats.
- Enhance decision-making and leadership capabilities in secure development.
- Improve efficiency through security automation and continuous compliance.
- Strengthen collaboration between technical and security teams.
- Minimize risks and operational downtime through proactive defense.
- Align security objectives with business goals and innovation strategies.
- Advance your professional credibility in cybersecurity and cloud management.

Conclusion

Embedding security into every stage of the cloud development lifecycle is not just a best practice – it's a necessity for organizational resilience. This course equips participants with the technical and strategic knowledge to safeguard CI/CD pipelines, secure cloud environments, and implement continuous security at scale.





By mastering these principles, professionals can lead their teams toward a culture of security-driven innovation, ensuring that cloud transformations remain both agile and safe.

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



المؤسسة العامة للتأمينات الاجتماعية
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.



هيئة تنظيم الكهرباء - عمان
Authority for
Electricity Regulation, Oman

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

