Professional Cloud Infrastructure Management and Operations Training Course



07 - 11 Dec 2026

Düsseldorf

5900 € (Per Person)

Ref: #IT9610_48972

Course Introduction / Overview:

Cloud computing has fundamentally changed how organizations build and manage their IT infrastructure, offering unprecedented scalability and flexibility. However, without proper management, it can lead to complexity and ballooning costs. This Professional Cloud Infrastructure Management and Operations Training Course is designed to equip IT professionals with the skills to effectively manage and optimize cloud environments. The curriculum provides a deep dive into key areas like cloud service models (IaaS, PaaS, SaaS), security best practices, and cost management. Participants will learn how to automate infrastructure deployment, monitor performance, and ensure compliance in a multi-cloud or hybrid-cloud setting. We will explore how to make strategic decisions about cloud adoption, migration, and governance. The course also incorporates insights from academic texts, such as "Cloud Computing: Concepts, Technology & Architecture" by Thomas Erl, Zaigham Mahmood, and Ricardo Puttini, which provides a foundational understanding of cloud technology. BIG BEN Training Center believes that mastering cloud infrastructure is essential for any organization seeking to enhance its strategic agility and competitive advantage.

Target Audience / This training course is suitable for:

- Cloud Architects and Engineers.
- IT Managers and Directors.
- System Administrators.
- DevOps Engineers.
- Network Administrators.
- Information Security Professionals.

Target Sectors and Industries:

- Technology and software.
- Financial services.
- Telecommunications.
- Retail and e-commerce.
- Government agencies and public sector.
- Healthcare.

Target Organizations Departments:

- Information Technology.
- DevOps and Site Reliability Engineering.
- Infrastructure and Operations.
- Information Security.
- Finance.
- Strategic Planning.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a strategic plan for cloud adoption.
- Manage and monitor cloud infrastructure resources.
- Implement robust cloud security and governance policies.
- Automate infrastructure deployment using Infrastructure as Code.
- Optimize cloud costs and resource utilization.
- Ensure compliance with regulatory requirements.
- Manage a multi-cloud or hybrid-cloud environment.

Course Methodology:

The training methodology for this course at BIG BEN Training Center is highly practical, combining theoretical knowledge with hands-on labs and real-world case studies. The course includes workshops where participants will practice deploying and managing resources on a cloud platform. We will use interactive sessions to discuss challenges such as managing cloud costs or ensuring security in a multi-tenant environment. The curriculum is designed to be a collaborative learning experience where attendees can apply the principles of cloud management to practical scenarios. This approach ensures that participants can confidently apply their new skills immediately in their professional roles. Our goal is to empower IT professionals to become strategic leaders who can effectively manage and leverage cloud technology.

Course Agenda (Course Units):

Unit One: Strategic Foundations of Cloud Management.

- Understanding cloud service models (IaaS, PaaS, SaaS).
- Developing a strategic cloud adoption plan.
- Comparing major cloud providers (AWS, Azure, Google Cloud).
- Cloud migration strategies.
- The business case for cloud computing.
- The role of a cloud architect.
- Building a cloud governance framework.

Unit Two: Cloud Infrastructure Operations.

- Managing compute, storage, and networking services.
- Automating infrastructure with Infrastructure as Code (IaC).
- Monitoring cloud performance and health.
- Implementing autoscaling and load balancing.
- Managing containers (Docker, Kubernetes).
- Backup and disaster recovery in the cloud.
- Deploying and managing hybrid cloud environments.

Unit Three: Cloud Security and Identity Management.

- Shared responsibility model in the cloud.
- Implementing cloud security best practices.
- Identity and Access Management (IAM).
- Network security in the cloud (VPCs, security groups).
- Data encryption and protection.
- Ensuring compliance with cloud security standards.
- Conducting cloud security audits.

Unit Four: Cost Management and Financial Governance.

- Understanding cloud billing and cost structures.
- Implementing cost optimization strategies.
- Using tools for cost management.
- Creating a cloud financial governance framework (FinOps).
- Budgeting and forecasting for cloud spend.
- Resource tagging and allocation.
- Rightsizing and resource automation.

Unit Five: Cloud Strategy and Innovation.

- Leveraging cloud-native services (serverless, AI/ML).
- Building a resilient and scalable architecture.
- Managing multi-cloud environments.
- The future of cloud computing.
- Integrating cloud management with DevOps.
- Training and upskilling your team.
- Communicating the value of clouds to stakeholders.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can organizations effectively balance the need for rapid innovation and agility in the cloud with the critical requirements of cost control, security, and governance?

What unique qualities does this course offer compared to other courses?

This training course provides a holistic and strategic approach to cloud management, setting it apart from other programs that focus narrowly on a single technology or a specific cloud provider. The curriculum is designed to help professionals develop a strategic mindset, not just a set of technical skills. We emphasize the critical role of cloud management in achieving business value, using real-world case studies to illustrate how to navigate the complexities of cost, security, and governance. The course moves beyond theory to provide practical skills in all key areas of cloud operations, ensuring participants can lead complex projects and drive organizational change. BIG BEN Training Center's approach is to empower attendees to become true leaders in the cloud, helping them build and manage a flexible, secure, and cost-effective infrastructure.