

Updated on 04/23/2026

Sign up

Introduction to the Cloud Training: Overview, Costs, and Security

3 days (21 hours)

Overview

The move to the cloud has become an essential strategic lever for business agility, offering unmatched flexibility and computing power. However, this transition requires new approaches: fine-grained security management and control of operational costs (OpEx). Understanding these challenges allows you to transform the cloud into a true driver of innovation rather than an opaque cost center.

This training program is designed to equip you to effectively manage and optimize your cloud environments. You will learn not only to design robust and secure architectures but also to adopt a FinOps approach to maximize the value of every dollar spent. By combining technical expertise (IaaS/PaaS) with business acumen (Governance/Costs).

This training provides you with the tools to communicate effectively with all stakeholders in a cloud project, from engineers to financial decision-makers.

The teaching approach is resolutely pragmatic and interactive, drawing on real-world scenarios and concrete demonstrations. Each theoretical module is immediately followed by hands-on workshops—designing diagrams, conducting security audits, or running budget simulations—to help solidify your knowledge.

Objectives

- Understand the fundamental concepts of the cloud and its main models (IaaS, PaaS, SaaS)
- Identify and analyze the costs associated with cloud services
- Apply security best practices in a cloud environment
- Compare cloud solutions and evaluate their suitability for different business needs

Target Audience

- Project managers
- IT managers
- Architects
- Systems and network engineers
- Anyone wishing to gain a comprehensive and practical understanding of the Cloud

Prerequisites

- Basic IT knowledge (networks, systems)
- Fundamentals of IT project management

Technical prerequisites

- Computer with at least 8 GB of RAM (16 GB recommended)
- Windows, macOS, or Linux (WSL2 recommended on Windows)
- Modern browser and access to a terminal (PowerShell/Bash/Zsh)
- Code editor (VS Code or equivalent)

Our Introduction to the Cloud Training Program: Overview, Costs, and Security

[Day 1 - Morning]

Fundamentals and Service Strategy

- Elasticity, sharing, and the shift from CapEx to OpEx
- Service Selection: Detailed Comparison of IaaS, PaaS, and SaaS from a Project Management Perspective
- Deployment Models: Hybrid and Multi-Cloud Strategies for Resilience
- Hands-on workshop: Analysis of a requirements specification and selection of the optimal service model.

[Day 1 - Afternoon]

Architecture, Identities, and Governance

- Network infrastructure: VPC, subnets, routing, and traffic security (TLS)
- Identity Management (IAM)
- Resource structuring
- Hands-on workshop: Designing a secure multi-environment (Dev/Prod) architecture.

[Day 2 - Morning]

Budget Management and FinOps

- Cost Analysis: Billing Drivers (Compute, Egress, Storage) and Pricing Models (Spot, Reserved)
- FinOps: visibility, cost allocation, and a culture of budget accountability
- Hands-on workshop: Comprehensive budget simulation and setting up alert thresholds for a typical project.

[Day 2 - Afternoon]

Optimization and High Availability

- Performance vs. Cost: Right-sizing, Auto-scaling, and storage class selection
- Service Continuity: Multi-AZ, Load Balancing, and Impact on the Project SLA
- Hands-on workshop: Audit of an existing infrastructure and proposal of an optimization plan (ROI).

[Day 3 - Morning]

Security and Shared Responsibility

- Security Framework: Understanding and Applying the Shared Responsibility Model
- Encryption, secret management, and access hardening
- Hands-on workshop: Security review (Threat Modeling) of a cloud infrastructure.

[Day 3 - Afternoon]

Governance, Compliance, and Resilience

- Compliance Framework: GDPR, Data Localization, and Digital Sovereignty
- Incident management: observability, logs, and disaster recovery plans (DRP)
- Hands-on workshop: Developing an incident management runbook and a governance policy.

Target Audience

This training is intended for both individuals and companies, large or small, seeking to train their teams in new advanced IT technologies or to acquire specific business knowledge or modern methodologies.

Assessment upon enrollment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency with various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also enables us to anticipate certain connection issues or

internal security issues within the company (intra-company or virtual classroom) that could pose challenges for the monitoring and smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical instruction from the instructor—supported by examples and discussion sessions—and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.