Training Course on Cloud Computing and Educational Infrastructure

Professional Development Training Course Outline

Category	Educational Leadership and Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In the modern educational landscape, cloud computing has become a cornerstone for transforming how institutions manage digital infrastructure, deliver online learning, and ensure data scalability and cybersecurity. Training Course on Cloud Computing and Educational Infrastructure equips educational leaders, IT administrators, and educators with in-depth knowledge and hands-on skills to effectively design, implement, and optimize cloud-based solutions for enhanced teaching, learning, and administrative efficiency. As digital transformation accelerates, understanding cloud platforms such as AWS, Microsoft Azure, and Google Cloud for Education is crucial in fostering equitable access, collaborative environments, and real-time analytics.

This training bridges the gap between technical implementation and strategic decision-making, helping institutions future-proof their infrastructure while promoting data-driven instruction, cost-effective technology integration, and student-centered learning environments. Through immersive case studies, practical labs, and guided implementation strategies, participants will leave empowered to lead cloud transformation initiatives confidently.

Programme Curriculum

Training Course on Cloud Computing and Educational Infrastructure

Introduction

In the modern educational landscape, cloud computing has become a cornerstone for transforming how institutions manage digital infrastructure, deliver online learning, and ensure data scalability and cybersecurity. Training Course on Cloud Computing and Educational Infrastructure equips educational leaders, IT administrators, and educators with in-depth knowledge and hands-on skills to effectively design, implement, and optimize cloud-based solutions for enhanced teaching, learning, and administrative efficiency. As digital transformation accelerates, understanding cloud platforms such as AWS, Microsoft Azure, and Google Cloud for Education is crucial in fostering equitable access, collaborative

environments, and real-time analytics.

This training bridges the gap between technical implementation and strategic decision-making, helping institutions future-proof their infrastructure while promoting data-driven instruction, cost-effective technology integration, and student-centered learning environments. Through immersive case studies, practical labs, and guided implementation strategies, participants will leave empowered to lead cloud transformation initiatives confidently.

Course Objectives

Participants will be able to:

1. Define the core concepts and components of cloud computing in education.
2. Evaluate cloud service models (IaaS, PaaS, SaaS) relevant to academic institutions.
3. Integrate cloud technologies to improve data management and access scalability.
4. Assess security protocols and compliance regulations for educational cloud platforms.
5. Apply cloud-based LMS (Learning Management Systems) for digital learning environments.
6. Build cost-effective and scalable virtual classrooms and storage infrastructure.
7. Utilize cloud analytics for real-time data-driven academic interventions.
8. Implement hybrid cloud strategies for seamless in-person and virtual learning.
9. Explore AI-powered cloud tools to personalize student learning experiences.
10. Manage cloud migration projects and mitigate associated risks.
11. Understand cloud backup, recovery, and continuity planning in schools.
12. Compare vendor solutions (AWS Educate, Microsoft Azure for Education, Google Workspace).
13. Design institution-wide cloud adoption roadmaps with KPIs and monitoring tools.

Target Audiences

1. School and university IT administrators
2. Educational technology specialists
3. Curriculum developers and instructional designers
4. Academic deans and department heads
5. School principals and education policymakers
6. Network and systems engineers in education
7. EdTech startup teams and consultants
8. Online learning coordinators and LMS managers

Course Duration: 5 days

Course Modules

Module 1: Introduction to Cloud Computing in Education

- Understanding cloud computing architecture
- Cloud service models and deployment types
- Benefits and challenges in educational environments
- Key terminologies and tools overview
- Public vs. private cloud in academic settings
- **Case Study**: Transitioning a traditional school to a cloud-first environment

Module 2: Cloud-Based Learning Management Systems (LMS)

- Integrating LMS platforms with cloud infrastructure
- Enhancing remote learning with scalable resources
- Storage and real-time data access benefits
- Collaboration features enabled by the cloud

- Open-source vs. commercial LMS cloud hosting
- **Case Study**: Cloud migration of Moodle in a university

Module 3: Cloud Security and Compliance

- Common cybersecurity threats in cloud adoption
- FERPA, GDPR, and other compliance standards
- Identity management and access control systems
- Secure authentication and data encryption
- Risk mitigation strategies for educational institutions
- **Case Study**: Implementing Azure security features in a school district

Module 4: Cost Optimization and Scalability

- Understanding subscription and pricing models
- Pay-as-you-go models and resource monitoring
- Auto-scaling and storage management
- Budget forecasting and ROI analysis
- Managing resource waste and over-provisioning
- **Case Study**: Google Cloud cost reduction strategy in a K-12 system

Module 5: Hybrid and Multi-Cloud Solutions

- When to choose hybrid or multi-cloud setups
- Integration across different vendors
- Syncing on-premise with cloud solutions
- Ensuring seamless user experiences
- Tools for hybrid deployment management
- **Case Study**: Dual-cloud deployment in a college network infrastructure

Module 6: Data Analytics and AI Integration

- Collecting and analyzing educational performance data
- AI-powered student tracking and personalization
- Predictive analytics for student retention
- Dashboards for administrators and teachers
- Cloud-based assessment and grading systems
- **Case Study**: Using AWS AI to track student performance in higher ed

Module 7: Implementation and Migration Strategies

- Pre-migration assessments and checklists
- Phased vs. full migration models
- Vendor support and third-party tools
- Migration pitfalls and rollback plans
- Staff training and change management
- **Case Study**: End-to-end cloud migration of a school district's database

Module 8: Monitoring, Support, and Sustainability

- Continuous performance monitoring
- Setting KPIs for cloud implementation
- Automated alerts and incident management
- Helpdesk integration and SLA considerations
- Long-term planning for scalability and innovation
- **Case Study**: Developing a 3-year sustainability plan for cloud integration

Training Methodology

- Interactive expert-led presentations
- Hands-on lab simulations using AWS, Azure, and Google Cloud
- Real-world case study analysis and discussion
- Peer-to-peer knowledge exchange and Q&A forums
- Cloud adoption planning templates and toolkits
- Pre- and post-assessment for measuring learning outcomes

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com