Serverless Business Intelligence Architectures Training Course

Professional Development Training Course Outline

Category	Business Intelligence	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Serverless Business Intelligence Architectures represent a transformative shift in modern data ecosystems, enabling scalable, cost-efficient, and high-performance analytics without the overhead of infrastructure management. Serverless Business Intelligence Architectures Training Course is designed to equip professionals with cutting-edge knowledge in cloud-native data platforms, event-driven architectures, real-time analytics, and automated data pipelines. Participants will gain hands-on expertise in designing, deploying, and optimizing serverless business intelligence solutions using industry-leading tools and frameworks, ensuring agility, resilience, and innovation in data-driven decision-making environments.

In today’s rapidly evolving digital landscape, organizations are increasingly adopting serverless computing, data lakes, AI-powered analytics, and microservices-based BI solutions to stay competitive. This course integrates advanced concepts such as data orchestration, API-driven analytics, streaming data processing, and cost optimization strategies, empowering learners to build robust, secure, and scalable BI architectures. By the end of the program, participants will be proficient in leveraging serverless platforms to deliver real-time insights, improve operational efficiency, and drive business intelligence transformation.

Programme Curriculum

Serverless Business Intelligence Architectures Training Course

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Course Objectives

1. Develop expertise in serverless computing and cloud-native BI solutions
2. Design scalable and cost-efficient data architectures using modern frameworks
3. Implement real-time analytics using event-driven data pipelines
4. Master data integration, ETL automation, and orchestration techniques
5. Utilize cloud data warehouses and data lakes for advanced analytics
6. Apply security, governance, and compliance best practices in BI systems
7. Build API-driven analytics and microservices-based BI applications
8. Optimize performance and cost in serverless BI environments
9. Integrate machine learning and AI capabilities into BI workflows
10. Develop interactive dashboards and data visualization solutions
11. Implement streaming analytics for real-time business insights
12. Ensure high availability and fault tolerance in serverless systems
13. Lead digital transformation initiatives using modern BI strategies

Organizational Benefits

- Enhanced scalability and flexibility in data analytics infrastructure
- Reduced operational costs through serverless architecture adoption
- Faster decision-making with real-time data processing
- Improved data governance and compliance frameworks
- Increased agility in deploying analytics solutions
- Streamlined data integration and automation processes
- Strengthened security and risk management practices
- Better utilization of cloud-native technologies
- Improved collaboration across data and business teams
- Competitive advantage through advanced analytics capabilities

Target Audiences

- Data Engineers
- Business Intelligence Analysts
- Cloud Architects
- Data Scientists
- IT Managers
- Software Developers
- DevOps Engineers
- Digital Transformation Leaders

Course Duration: 5 days

Course Modules

Module 1: Introduction to Serverless BI Architectures

- Fundamentals of serverless computing and BI integration
- Overview of cloud-native analytics platforms
- Key benefits and challenges of serverless BI
- Comparison with traditional BI architectures
- Core components of serverless ecosystems
- Case Study: Transition from traditional BI to serverless architecture

Module 2: Cloud Data Storage Solutions

- Data lakes vs data warehouses concepts
- Cloud storage services and architecture design
- Data partitioning and optimization strategies
- Managing structured and unstructured data
- Data lifecycle management in the cloud
- Case Study: Implementing a scalable cloud data lake

Module 3: Data Integration and ETL Automation

- Designing automated ETL pipelines
- Data ingestion techniques and tools
- Workflow orchestration and scheduling
- Data transformation best practices
- Monitoring and error handling in pipelines
- Case Study: Building an automated ETL pipeline

Module 4: Event-Driven Architecture and Streaming Analytics

- Principles of event-driven systems
- Real-time data processing frameworks
- Message queues and streaming platforms
- Designing low-latency data pipelines
- Integration with BI tools
- Case Study: Real-time analytics for business operations

Module 5: Serverless Compute and Microservices

- Serverless functions and execution models
- Microservices architecture for BI
- API gateways and integration
- Scaling and performance optimization
- Cost management strategies
- Case Study: Building microservices-based BI solutions

Module 6: Data Visualization and BI Tools

- Designing interactive dashboards
- Visualization best practices
- Integration with cloud BI tools

- User experience and accessibility considerations
- Data storytelling techniques
- Case Study: Creating executive dashboards for decision-making

Module 7: Security and Governance in Serverless BI

- Data security principles and encryption
- Identity and access management
- Compliance and regulatory requirements
- Data governance frameworks
- Risk assessment and mitigation
- Case Study: Implementing secure BI architecture

Module 8: Performance Optimization and Cost Management

- Monitoring system performance
- Cost optimization strategies in serverless environments
- Resource allocation and scaling techniques
- Performance tuning methods
- Benchmarking and evaluation
- Case Study: Optimizing cost and performance in BI systems

Training Methodology

- Instructor-led interactive sessions with practical demonstrations
- Hands-on labs and real-world project simulations
- Group discussions and collaborative learning exercises
- Case study analysis and problem-solving activities
- Use of industry tools and cloud platforms
- Continuous assessment and feedback sessions

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
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:

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