Big Data for Banks Training Course

Professional Development Training Course Outline

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

Course Introduction

In today’s hyper-connected financial ecosystem, Big Data analytics, artificial intelligence (AI), machine learning (ML), predictive analytics, and real-time data processing are transforming the banking industry. Financial institutions are leveraging data-driven decision-making, customer analytics, fraud detection systems, risk modeling, and digital transformation strategies to enhance operational efficiency and deliver personalized banking experiences. Big Data for Banks Training Course provides a comprehensive understanding of how Big Data technologies such as Hadoop, Spark, cloud computing, and data lakes empower banks to stay competitive in a rapidly evolving digital landscape.

As regulatory pressures increase and customer expectations evolve, banks must harness advanced analytics, data governance frameworks, cybersecurity analytics, and regulatory technology (RegTech) to ensure compliance and innovation. This training equips participants with practical knowledge and tools to implement data monetization strategies, real-time analytics dashboards, customer segmentation models, and AI-driven banking solutions. Through case studies and hands-on methodologies, participants will gain actionable insights into leveraging Big Data for strategic advantage in modern banking

Programme Curriculum

Big Data for Banks Training Course

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Course Objectives

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

1. Understand Big Data architecture and ecosystem in banking
2. Apply data analytics and predictive modeling techniques
3. Implement AI and machine learning in financial services
4. Utilize real-time data processing for decision-making
5. Design customer 360° analytics and personalization strategies
6. Strengthen fraud detection and anti-money laundering (AML) analytics
7. Develop risk analytics and credit scoring models
8. Implement data governance and compliance frameworks
9. Leverage cloud computing and data lakes in banking
10. Optimize data-driven operational efficiency
11. Build interactive dashboards and business intelligence tools
12. Apply cybersecurity analytics for threat detection
13. Create data monetization and digital transformation strategies

Target Audience

1. Banking Executives and Managers
2. Data Analysts and Data Scientists
3. Risk and Compliance Officers
4. IT and Digital Transformation Teams
5. Fraud and AML Specialists
6. Business Intelligence Professionals
7. FinTech and Innovation Teams
8. Operations and Strategy Managers

Course Modules

Module 1: Introduction to Big Data in Banking

- Overview of Big Data concepts and trends
- Key technologies-Hadoop, Spark, NoSQL
- Banking use cases for Big Data
- Data sources in financial institutions
- Challenges and opportunities
- Case Study: Implementation of Big Data analytics in a global retail bank

Module 2: Data Architecture and Infrastructure

- Data lakes vs data warehouses
- Cloud-based banking analytics platforms
- Data integration and ETL processes
- Scalable data infrastructure design
- Data storage optimization
- Case Study: Migration to cloud-based data architecture in banking

Module 3: Advanced Data Analytics

- Predictive and prescriptive analytics
- Data mining techniques
- Statistical modeling in banking
- Customer behavior analytics
- Data visualization tools
- Case Study: Customer churn prediction using analytics

Module 4: AI and Machine Learning Applications

- Machine learning models in banking
- AI-driven customer insights
- Automation and intelligent systems
- Natural language processing (NLP)
- Model deployment and monitoring
- Case Study: AI-powered chatbot implementation

Module 5: Fraud Detection and AML Analytics

- Fraud detection algorithms
- Transaction monitoring systems
- AML compliance analytics
- Behavioral analytics for fraud prevention
- Real-time anomaly detection
- Case Study: Real-time fraud detection system in digital banking

Module 6: Risk Analytics and Credit Scoring

- Credit risk modeling
- Stress testing and scenario analysis
- Portfolio risk analytics
- Basel regulatory requirements
- Data-driven lending decisions
- Case Study: Credit scoring model using alternative data

Module 7: Data Governance and Compliance

- Data privacy regulations
- Data quality management
- Governance frameworks
- Regulatory reporting automation
- Ethical use of data

- Case Study: Data governance transformation in a bank

Module 8: Data Monetization and Digital Transformation

- Monetizing banking data assets
- Digital banking strategies
- Open banking and APIs
- FinTech collaboration models
- Future trends in Big Data
- Case Study: Open banking ecosystem implementation

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

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:

Register Online Now

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