AI for Financial Forecasting 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

The banking industry is undergoing a rapid transformation driven by Artificial Intelligence (AI), Machine Learning (ML), Predictive Analytics, Generative AI, Big Data, Cloud Computing, and Intelligent Automation. Financial institutions are leveraging AI-powered forecasting models to improve profitability, optimize capital allocation, enhance risk management, detect fraud, and deliver personalized customer experiences. Traditional forecasting methods are increasingly being replaced by real-time predictive analytics, deep learning algorithms, scenario modeling, AI-driven stress testing, automated financial planning, and explainable AI (XAI). Banks that successfully integrate AI into financial forecasting gain competitive advantages through higher forecasting accuracy, faster decision-making, improved regulatory compliance, and enhanced operational resilience.

AI for Financial Forecasting for Banks Training Course equips banking professionals with practical knowledge and industry-leading techniques for implementing AI-driven forecasting solutions. Participants will explore predictive modeling, time-series forecasting, AI-powered budgeting, credit risk forecasting, liquidity management, treasury forecasting, ESG financial analytics, digital banking intelligence, reinforcement learning, MLOps, Generative AI for finance, and responsible AI governance. Through hands-on exercises, real-world banking case studies, and interactive workshops, learners will develop the skills needed to transform financial planning and forecasting using next-generation AI technologies while ensuring compliance with global banking regulations and ethical AI practices.

Programme Curriculum

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Course Duration

5 days

Course Objectives

Upon completion of this course, participants will be able to:

1. Understand Artificial Intelligence, Machine Learning, and Deep Learning applications in financial forecasting.
2. Develop AI-powered predictive financial models for banking operations.
3. Implement Time Series Forecasting using advanced AI algorithms.
4. Apply Generative AI to automate financial reporting and forecasting.
5. Utilize Predictive Analytics for revenue, expense, and profitability forecasting.
6. Integrate Big Data Analytics into banking financial forecasting.
7. Build Credit Risk Forecasting models using AI.
8. Enhance Liquidity Forecasting and Treasury Management through intelligent automation.
9. Perform Scenario Analysis and AI-based Stress Testing for financial resilience.
10. Apply Explainable AI (XAI) for transparent financial decision-making.
11. Deploy MLOps and AI Model Governance for production-ready forecasting solutions.
12. Strengthen Regulatory Compliance, AI Ethics, and Responsible AI in banking.
13. Design an enterprise-wide AI Financial Forecasting Strategy aligned with digital transformation initiatives.

Target Audience

- Chief Financial Officers (CFOs)
- Finance Managers and Financial Controllers
- Banking Risk Managers
- Treasury and Liquidity Management Professionals
- Financial Analysts and Business Analysts
- AI, Data Science, and Analytics Professionals
- Digital Banking and Transformation Leaders

- Internal Auditors, Compliance, and Regulatory Professionals

Course Modules

Module 1: Introduction to AI in Financial Forecasting

- AI evolution in banking and finance
- Machine Learning fundamentals
- Financial forecasting lifecycle
- AI adoption strategies in banks
- Digital transformation roadmap
- **Case Study:** AI adoption strategy for a multinational commercial bank.

Module 2: Predictive Analytics for Banking

- Predictive analytics techniques
- Regression and classification models
- Forecasting banking revenues
- Customer behavior prediction
- AI performance evaluation
- **Case Study:** Predicting branch profitability using machine learning.

Module 3: Time Series Forecasting and Financial Modeling

- ARIMA and Prophet forecasting
- LSTM and Deep Learning forecasting
- Cash flow forecasting
- Interest rate prediction
- Macroeconomic forecasting
- **Case Study:** AI forecasting of interest income for a retail bank.

Module 4: Credit Risk and Liquidity Forecasting

- Credit default prediction
- Loan portfolio forecasting
- Liquidity forecasting models
- Treasury optimization
- Early warning systems
- **Case Study:** AI-driven liquidity forecasting during market volatility.

Module 5: Generative AI and Intelligent Financial Planning

- Generative AI fundamentals
- Automated budgeting
- AI-generated financial reports
- Conversational AI for finance
- Intelligent financial assistants
- **Case Study:** Using Generative AI to automate quarterly financial reporting.

Module 6: AI Governance, Explainability, and Regulatory Compliance

- Explainable AI (XAI)

- AI governance frameworks
- Model risk management
- Responsible AI implementation
- Regulatory compliance requirements
- **Case Study:** Building explainable credit forecasting models for regulatory approval.

Module 7: MLOps and Enterprise AI Deployment

- MLOps lifecycle
- AI deployment strategies
- Model monitoring
- Cloud-based AI platforms
- Continuous model improvement
- **Case Study:** Deploying enterprise forecasting models across multiple banking regions.

Module 8: Future of AI Financial Forecasting

- AI-powered CFO office
- Reinforcement Learning applications
- ESG forecasting analytics
- Autonomous finance
- AI innovation roadmap
- **Case Study:** Enterprise AI transformation for future-ready financial forecasting.

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
21 Sep 2026	25 Sep 2026	Online	$1,000
21 Sep 2026	25 Sep 2026	Physical	$1,500
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0

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

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