

AI IN BANKING: ENHANCING OPERATIONS AND CUSTOMER ENGAGEMENT



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TRAINING CENTER



Introduction

The AI in Banking: Enhancing Operations and Customer Engagement Training Course prepares banking professionals to apply artificial intelligence where it creates measurable value. Banks hold vast data and repeatable processes, which makes them strong candidates for AI adoption. This course covers the models, data foundations, and governance that turn AI pilots into production systems. It examines fraud detection, credit scoring, chatbots, personalisation, and back-office automation. Furthermore, it addresses model risk, regulation, and responsible AI practice. As a result, participants learn to select the right use cases, brief technical teams, and measure AI results with confidence.

AI in Banking: Enhancing Operations and Customer Engagement Course Objectives

- Explain core AI and machine learning concepts in a banking context.
- Identify high-value AI use cases across retail, corporate, and operations.
- Apply the machine learning workflow from data preparation to deployment.
- Build credit scoring and fraud detection models using supervised learning.
- Evaluate natural language processing for chatbots and complaint handling.
- Design personalisation and next-best-action models for customer engagement.
- Use robotic process automation and intelligent document processing in operations.
- Assess model risk, explainability, and bias in banking AI systems.
- Apply AI governance aligned with Basel model risk and data protection rules.
- Measure AI performance using business, model, and customer KPIs.

Course Methodology

- Interactive lectures with real banking AI case studies and use cases.

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- Hands-on exercises on model design and feature selection.
- Workshops on use case prioritisation and business case building.
- Simulation of AI governance and model approval discussions.
- Structured peer discussion with facilitator feedback on AI deployment challenges.

Who Should Take This Course

- Banking operations and digital transformation managers.
- Data analysts and business intelligence professionals.
- Credit, risk, and fraud analytics specialists.
- Customer experience and contact centre leaders.
- Compliance and model risk officers.
- Product managers and technology project leads.

AI in Banking: Enhancing Operations and Customer Engagement Course Outlines

Day 1: AI Foundations for Banking

- Core concepts: machine learning, deep learning, and generative AI.
- Supervised, unsupervised, and reinforcement learning.
- Data foundations: quality, governance, and feature engineering.
- The AI project lifecycle from problem framing to deployment.
- Banking AI maturity and adoption patterns.
- Ethical, regulatory, and reputational considerations.
- Case study: a bank's journey from pilot to production AI.





Day 2: Credit, Risk, and Fraud Analytics

- Credit scoring models and alternative data sources.
- Probability of default modelling with machine learning.
- Early warning systems driven by predictive analytics.
- Fraud detection using anomaly detection and network analysis.
- AML transaction monitoring and alert triage.
- Model validation, backtesting, and monitoring.
- Workshop: designing a fraud detection model outline.

Day 3: Customer Engagement and Personalisation

- Natural language processing fundamentals for banking.
- Chatbots, virtual assistants, and conversational banking.
- Sentiment analysis and voice-of-customer analytics.
- Customer segmentation and micro-segmentation models.
- Next-best-action and product recommendation engines.
- Personalisation governance and consent management.
- Workshop: mapping a customer journey with AI touchpoints.

Day 4: Operations Automation and Efficiency

- Robotic process automation in back-office operations.
- Intelligent document processing for onboarding and KYC.
- Optical character recognition and data extraction accuracy.
- Straight-through processing and exception handling.
- Process mining and workflow analytics.

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- Measuring efficiency gains and cost-to-serve.
- Workshop: selecting an operations process for automation.

Day 5: Governance, Risk, and Scaling AI

- Model risk management frameworks and three lines of defence.
- Explainability, fairness, and bias testing methods.
- Data protection, privacy, and regulatory expectations.
- AI governance structures, policies, and approval gates.
- Cloud platforms, MLOps, and production monitoring.
- Scaling AI: talent, operating model, and change management.
- Course review, assessment, and action planning.

Conclusion

By successfully completing AI in Banking: Enhancing Operations and Customer Engagement, participants will gain a solid understanding of AI and machine learning concepts, banking use cases, data foundations, and governance requirements. They will also acquire practical skills in use case selection, model design, personalisation, automation, and model risk assessment. In addition, the course prepares them to scale AI responsibly across banking operations. Gentex Training Center delivers this programme with a strong focus on real banking practice and measurable business impact.

FAQs for AI in Banking: Enhancing Operations and Customer Engagement course





Q1 What is the "AI in Banking: Enhancing Operations and Customer Engagement" course about?

It is a five-day programme on applying artificial intelligence in banking. It covers machine learning foundations, credit and fraud analytics, chatbots and personalisation, operations automation, and AI governance, so participants can select use cases and turn them into working solutions.

Q2 What are the key benefits of the "AI in Banking: Enhancing Operations and Customer Engagement" course?

Participants learn to target AI where returns are real, which avoids wasted pilots and inflated expectations. The course reduces fraud and credit losses through better models, cuts processing costs with automation, improves customer experience and retention, and strengthens model risk and regulatory compliance.

Q3 What skills will I gain from the "AI in Banking: Enhancing Operations and Customer Engagement" course?

Participants gain AI use case identification and business case development, machine learning model design for credit and fraud, customer engagement and personalisation design using NLP, and operations automation with AI governance and model risk assessment. These four skills cover the AI journey from idea to governed production.



Q4 What tools, methods, or standards are covered in the "AI in Banking: Enhancing Operations and Customer Engagement" course?

The course covers supervised, unsupervised, and reinforcement learning, feature engineering, probability of default modelling, anomaly detection and network analysis for fraud, NLP and sentiment analysis, next-best-action engines, robotic process automation, intelligent document processing with OCR, process mining, MLOps, model risk management and the three lines of defence, explainability and bias testing, and data protection requirements.

Q5 How is the "AI in Banking: Enhancing Operations and Customer Engagement" course applied in real-world practice?

Participants apply the methods inside their own banks. They frame AI use cases, build business cases, design models with technical teams, define data and governance requirements, plan automation pilots, and set model monitoring indicators. Many leave with a prioritised AI roadmap ready to present to management.