Payment Infrastructure 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

Payment Infrastructure for Banks Training Course provides a comprehensive understanding of the rapidly evolving digital payments ecosystem, banking payment architecture, real-time payment systems, payment modernization, and financial technology transformation. As banks accelerate their transition toward instant payments, open banking, API-driven ecosystems, cloud-based payment platforms, and secure digital transaction channels, professionals must develop advanced knowledge of payment infrastructure design, operations, compliance, and innovation. This course explores the critical components of modern payment environments, including payment rails, clearing and settlement systems, SWIFT messaging, ISO 20022 standards, mobile payments, card processing, digital wallets, and cross-border payment solutions.

The program equips banking professionals with practical expertise to optimize payment processing efficiency, operational resilience, cybersecurity controls, fraud prevention frameworks, and regulatory compliance. Through real-world case studies, participants will examine how leading financial institutions are implementing next-generation payment platforms, artificial intelligence-driven transaction monitoring, blockchain-based settlement models, and embedded finance solutions. The course enables participants to design, manage, and enhance secure, scalable, and customer-centric payment infrastructures aligned with global banking trends.

Programme Curriculum

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Course Duration

5 days

Course Objectives

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

1. Understand the fundamentals of modern banking payment infrastructure and digital payment ecosystems.
2. Analyze payment processing architecture, transaction flows, and settlement mechanisms.
3. Implement ISO 20022 messaging standards and payment data transformation strategies.
4. Evaluate real-time payment systems and instant payment capabilities.
5. Develop strategies for payment infrastructure modernization and digital transformation.
6. Strengthen payment security, cybersecurity controls, and fraud risk management.
7. Understand SWIFT networks, correspondent banking, and cross-border payment frameworks.
8. Apply API banking, open banking, and embedded payment solutions.
9. Improve payment operations efficiency and transaction lifecycle management.
10. Assess cloud-based payment platforms and scalable banking technology solutions.
11. Manage regulatory compliance, governance, and payment risk frameworks.
12. Explore AI, machine learning, and automation applications in payment processing.
13. Design future-ready customer-centric payment strategies and innovation models.

Target Audience

1. Bank payment operations managers and specialists
2. Digital banking transformation professionals
3. Treasury and transaction banking teams
4. IT architects and banking technology professionals
5. Risk management and compliance officers
6. FinTech and payment solution managers
7. Banking product managers and innovation teams
8. Financial services executives and strategic planners

Course Modules

Module 1: Fundamentals of Banking Payment Infrastructure

- Evolution of traditional and digital payment ecosystems
- Components of modern payment infrastructure architecture

- Payment networks, processors, and transaction channels
- Roles of banks, regulators, clearing houses, and FinTech providers
- Payment lifecycle from initiation to settlement
- Case Study: Global Bank Payment Transformation Project

Module 2: Payment Processing Architecture and Technology

- Core banking integration with payment platforms
- Payment gateways and transaction processing engines
- Middleware and enterprise service bus architecture
- High-availability payment processing environments
- Scalability and performance optimization
- Case Study: Large Retail Bank Digital Payments Upgrade

Module 3: Real-Time Payments and Instant Payment Systems

- Real-time payment infrastructure models
- Instant payment clearing and settlement mechanisms
- Faster Payments, RTP, and global payment networks
- Liquidity management for instant transactions
- Customer experience improvements through real-time payments
- Case Study: Instant Payment Adoption by a Leading Bank

Module 4: ISO 20022, SWIFT, and Payment Messaging Standards

- Introduction to ISO 20022 financial messaging
- Migration strategies from legacy messaging formats
- SWIFT payment communication infrastructure
- Data enrichment and payment transparency
- Regulatory reporting using structured payment data
- Case Study: Bank ISO 20022 Migration Program

Module 5: Digital Payments, Mobile Banking, and Wallet Infrastructure

- Mobile payment ecosystem architecture
- Digital wallets and payment platforms
- QR payments and contactless transactions
- Tokenization and secure payment authentication
- Customer-focused digital payment innovation
- Case Study: Mobile Payment Growth Strategy.

Module 6: Payment Security, Fraud Prevention, and Risk Management

- Payment cybersecurity frameworks
- Fraud detection and transaction monitoring
- Artificial intelligence in payment risk management
- Identity verification and authentication technologies
- Operational resilience and cyber risk controls
- Case Study: AI-Based Fraud Detection Implementation.

Module 7: Open Banking, APIs, and Future Payment Innovation

- Open banking payment infrastructure
- API-based payment connectivity
- Embedded finance and Banking-as-a-Service
- Blockchain and distributed ledger applications
- FinTech partnerships and payment innovation models
- Case Study: Open Banking Payment Ecosystem Development

Module 8: Payment Infrastructure Governance, Compliance, and Future Trends

- Payment regulations and compliance frameworks
- Governance models for payment platforms
- Vendor and third-party payment risk management
- Cloud migration strategies for payment systems
- Future trends in digital currencies and intelligent payments
- Case Study: Banking Payment Infrastructure Cloud Transformation

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

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