

Central Bank Digital Currency (CBDC) Fundamentals 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 global financial architecture is undergoing a foundational paradigm shift driven by the rise of sovereign tokenization and programmable money. As legacy payment infrastructures face increasing pressure from decentralized finance (DeFi), central banks worldwide are rapidly deploying Central Bank Digital Currencies (CBDCs) to preserve monetary sovereignty and optimize cross-border liquidity. Central Bank Digital Currency (CBDC) Fundamentals for Banks Training Course bridges the gap between legacy banking frameworks and the future of digital fiat, arming industry participants with the high-impact knowledge required to navigate this evolution.

Through a highly technical and strategic lens, this curriculum breaks down the core mechanics of both retail and wholesale digital currencies, focusing heavily on architectural design, tokenized assets, and interoperability protocols. Participants will explore the deep operational implications of running nodes, managing smart contracts, and handling programmatic compliance within a two-tier banking ecosystem. By contextualizing macroeconomic theories alongside real-world pilot deployments, this course delivers actionable insights for modernizing core banking systems, safeguarding liquidity against deposit disintermediation, and capturing new market share within the sovereign digital asset space.

Programme Curriculum

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Course Duration

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Course Objectives

By the conclusion of this intensive program, participants will be equipped to:

1. Differentiate between token-based and account-based CBDC models across centralized and decentralized ledgers.
2. Assess the distinct deployment strategies for retail public access and wholesale high-value bank clearing.
3. Formulate balance sheet strategies to counter commercial bank deposit drain during systemic flights to safety.
4. Implement automated regulatory rules using smart contracts for real-time KYC, AML,
5. Design bridges between legacy RTGS systems, private permissioned distributed ledgers, and public blockchains.
6. Leverage Multi-CBDC (mCBDC) corridors to eliminate fractional banking friction, clearing fees, and settlement delays.
7. Integrate programmable fiat with tokenized securities, real-world assets (RWAs), and automated smart contracts.
8. Balance user transactional anonymity with regulatory auditability using Zero-Knowledge Proofs (ZKPs).
9. Harden core infrastructure against quantum threats, double-spending exploits, and single points of ledger failure.
10. Implement secure hardware-based, dual-offline payment solutions for resilient peer-to-peer (P2P) transfers.
11. Analyze the direct impact of programmable interest rates and targeted fiscal stimulus on liquidity.
12. Align bank operations with evolving frameworks from the BIS, CPMI, FSB, and IMF.
13. Draft a technical roadmap for upgrading APIs, database ledgers, and custodial wallets for CBDC integration.

Target Audience

- Chief Innovation Officers & Fintech Strategy Leads.
- Treasury & Liquidity Risk Managers.
- Compliance, AML, & Regulatory Officers.
- Enterprise Software Architects & IT Directors.
- Head of Payments & Clearing Operations.
- Commercial Banking Product Managers.

- Central Bankers & Financial Regulatory Policy Advisor.
- Investment Banking & Tokenized Asset Specialists

Course Modules

1.Module 1: The Foundations of Sovereign Digital Currency

- Evolution of money
- Comparative breakdown of CBDCs and commercial bank money, stablecoins, and algorithmic crypto-assets.
- Architectural archetypes.
- Cryptographic fundamentals
- **Case Study:** *The Sand Dollar (Bahamas)*

2.Module 2: Wholesale CBDC (wCBDC) & Capital Markets.

- Mechanics of wholesale tokenized fiat in interbank clearing and high-value domestic financial markets.
- Real-Time Gross Settlement (RTGS) evolution.
- Delivery-versus-Payment (DvP) optimizations for clearing tokenized equities, bonds, and structured financial products.
- Payment-versus-Payment (PvP) mechanics for managing risk in multi-currency transactions.
- **Case Study:** *Project Helvetia (Swiss National Bank / BIS).*

3.Module 3: Retail CBDC (rCBDC) & The Banking Ecosystem

- Distribution design patterns.
- Account-based vs. token-based retail validation models and their impacts on user onboarding friction.
- Data privacy vs. regulatory visibility.
- Point-of-Sale (POS) integration, merchant acceptance, and offline peer-to-peer (P2P) local hardware storage solutions.
- **Case Study:** *e-CNY (Digital Yuan, China)*

4.Module 4: Programmable Money & Asset Tokenization

- Smart contract architecture
- Synergies between CBDC ledgers and Tokenized Real-World Assets (RWAs) such as real estate, trade invoices, and commodities.
- Automated escrow, programmatic distribution of government fiscal stimulus, and autonomous corporate supply-chain financing.
- Technical friction points.
- **Case Study:** *Project Mariana (BIS / Banque de France / MAS / SNB).*

5.Module 5: Cross-Border mCBDC Infrastructure.

- Cross-border friction points
- Multi-CBDC (mCBDC) models.
- Real-time FX quoting, automated atomic conversion corridors, and the role of liquidity bridges.
- Geopolitical impacts.
- **Case Study:** *Project mBridge (BIS / HKMA / UAE / China / Thailand)*

6.Module 6: Macroeconomics, Monetary Policy, & Disintermediation

- Commercial disintermediation.
- Defensive balance sheet strategies.
- Real-time monetary policy transmission
- Fractional reserve banking stresses
- **Case Study:** *Digital Euro Design Framework (European Central Bank)*

7.Module 7: Cybersecurity, Resilience, & Technical Integration

- Threat vector analysis
- Disaster recovery designs.
- Cryptographic migration.
- Legacy tech transformation.
- **Case Study:** *Project Hamilton (Federal Reserve Bank of Boston / MIT OpenCD)*

8.Module 8: Compliance, Identity, & Regulatory Frameworks

- Reconciling the travel rule, AML regulations, and combatting the financing of terrorism (CFT) inside digital tokens.
- Decentralized Identity (DID) systems, verifiable credentials, and integration with traditional KYC databases.
- Governance matrices for multi-party cross-border networks.
- Auditing digital ledgers
- **Case Study:** *Project Dunlop (Reserve Bank of India Retail Pilot)*

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

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