
Decentralized Finance (DeFi) Institutional Applications Training Course

27 September – 1 October 2027
London - Premier Inn Victorya





Decentralized Finance (DeFi) Institutional Applications Training Course

Ref: 2_10531 **Date:** 27 September – 1 October 2027 **Location:** London - Premier Inn Victorya **Fees:** 4300 GBP

Programme Summary

The Decentralized Finance DeFi Institutional Applications Training Course is a one-week programme designed for managerial professionals seeking to evaluate, structure, and govern blockchain-based financial mechanisms, culminating in an institutional decentralized deployment roadmap. Financial institutions face structural shifts as automated market making, liquidity pools, and asset tokenization challenge conventional clearing and settlement processes. This curriculum provides a rigorous technical examination of smart contract architectures, decentralized lending protocols, and supervisory compliance frameworks. Mars Training Centre UK delivers this professional programme in Decentralized Finance DeFi Institutional Applications.

The Business Case

Traditional financial organisations engaging with distributed ledger protocols must address capital inefficiencies, counterparty exposures, and operational vulnerabilities inherent in automated execution. Establishing internal governance and technical fluency over decentralized architecture enables institutions to optimise capital allocation, eliminate intermediary friction, and enforce institutional risk controls across novel liquidity networks.

- Counterparty Settlement Risk: Minimises default exposure by transitioning bilateral financial contracts to deterministic, collateralised smart contract execution.
- Capital Allocation Velocity: Enhances liquidity efficiency through automated market making models and continuous pool rebalancing mechanisms.
- Operational Compliance Assurance: Mitigates regulatory exposure by integrating automated transaction screening and identity verification across distributed protocols.

Principles and Evidence Base

- Financial Stability Board FSB Policy Recommendations for Decentralized Finance: Directs institutional governance structures, supervisory reporting arrangements, and cross-border risk management controls.
- Bank for International Settlements BIS Prudential Framework for Cryptoassets: Establishes capital adequacy criteria, exposure limits, and operational resilience baselines for institutions interacting with decentralized protocols.
- Financial Action Task Force FATF Standards on Virtual Assets: Governs anti-money laundering controls, counter-terrorist financing rules, and the technical execution of the Travel Rule across institutional nodes.



Intended Participants

- Investment and treasury managers responsible for evaluating institutional capital deployment across decentralized lending and liquidity protocols.
- Risk management officers accountable for auditing operational, smart contract, and liquidity exposures in digital asset operations.
- Financial product development specialists tasked with designing tokenised instruments and automated asset management structures.
- Compliance and legal officers charged with aligning distributed ledger activities with cross-border regulatory standards and surveillance obligations.

This syllabus provides direct operational relevance for professionals operating within commercial banking, asset management, capital markets, and financial market infrastructure.

Learning Outcomes

1. Participants will be able to evaluate the operational architecture of decentralized protocols, including automated market makers and collateralised debt facilities.
2. Participants will be able to diagnose systemic vulnerabilities and technical vulnerabilities within smart contract code and automated oracle networks.
3. Participants will be able to construct compliant capital deployment workflows incorporating decentralized stablecoin settlement and asset tokenization models.
4. Participants will be able to formulate institutional risk governance frameworks aligned with international prudential and supervisory recommendations.
5. Participants will be able to prioritize regulatory compliance controls, covering anti-money laundering monitoring, wallet screening, and customer due diligence.
6. Participants will be able to justify an institutional protocol deployment strategy to executive investment and risk committees.

Programme Structure

Day 1: Decentralized Finance Foundations and Architecture

How are core financial intermediation functions replicated through distributed ledger technology?

- Distributed Ledger Architecture and Consensus Mechanisms
- Smart Contract Execution and Gas Optimisation Models
- Decentralized Lending and Borrowing Architectures
- Collateralisation Mechanics and Liquidation Engines
- Decentralized Stablecoin Backing and Reserve Models

Day 2: Protocol Mechanics and Market Infrastructure

How do automated market makers and liquidity pools facilitate decentralized capital allocation?



- Constant Product Automated Market Maker Formulas
- Concentrated Liquidity and Order Book Hybrids
- Yield Aggregation Protocols and Staking Structures
- Cross-Chain Interoperability and Bridge Architectures
- Decentralized Exchange Routing and Slippage Controls

Day 3: Real-World Asset Tokenization and Institutional Interfaces

How are real-world assets originated, structured, and managed on decentralized ledgers?

- Real-World Asset Tokenization Legal Wrapper Models
- Tokenised Debt Instruments and Fund Structures
- Decentralized Oracle Networks and Data Feed Integrity
- Institutional Custody Solutions and Key Management Architecture
- On-Chain Identity Verification and Permissioned Pool Protocols

Day 4: Prudential Governance, Security, and Risk Management

How are operational, financial, and code-level vulnerabilities assessed and managed?

- Smart Contract Audit Methodologies and Formal Verification
- Oracle Manipulation Vulnerabilities and Economic Attack Vectors
- Run Risk and Liquidity Drain Stress Testing Models
- Financial Stability Board Policy Recommendations for Decentralized Finance
- Bank for International Settlements Prudential Exposure Rules

Day 5: Institutional Applications and Capstone Integration

How do institutions deploy and govern compliant decentralized finance solutions?

- Financial Action Task Force Travel Rule Protocol Implementation
- Automated Transaction Monitoring and Wallet Screening Integration
- Asset Tokenization Liquidity Strategy Formulation
- Institutional Smart Contract Risk Audit Scoring
- Institutional Decentralized Deployment Roadmap Presentation

Methodology

This programme adopts a structured exercise and analytical case methodology. Participants dissect active protocol architectures, calculate automated market making liquidity parameters, and evaluate institutional custody deployments under simulated operating environments, testing assumptions through peer review and operational audit rubrics.



- Suggested activity: Calibrating automated market maker liquidity distributions under simulated market volatility conditions.
- Suggested activity: Conducting a vulnerability and governance audit on a decentralized lending protocol arrangement.
- Suggested activity: Constructing a permissioned pool access model that integrates wallet screening and identity validation.

Capstone Output

Each participant produces an institutional decentralized deployment roadmap detailing a selected financial service implementation. This operational deliverable synthesises protocol selection criteria, a smart contract audit matrix, prudential compliance workflows, and liquidity management policies, equipping participants with an actionable template to guide internal capital allocation and risk reviews within sponsoring institutions.

Frequently Asked Questions

Does this programme in Decentralized Finance DeFi institutional applications suit managerial participants without programming experience?

Yes. The curriculum is tailored for managerial decision-makers, focusing on functional architectures, financial mechanisms, and governance controls without requiring prior code development proficiency.

Which regulatory models anchor the Decentralized Finance DeFi institutional applications curriculum?

The syllabus builds directly on the Financial Stability Board recommendations, Bank for International Settlements prudential guidance, and Financial Action Task Force standards for virtual assets.

How is the capstone output from this Decentralized Finance DeFi institutional applications programme applied in an enterprise?

The roadmap functions as an executive proposal document that operational teams and investment committees use to evaluate protocol security, balance sheet exposure, and compliance feasibility.

How does Decentralized Finance DeFi institutional applications training differ from standard digital asset programmes?

Unlike general digital asset courses that focus on cryptocurrency trading, this curriculum addresses non-custodial protocol mechanisms, smart contract governance, real-world asset tokenization, and institutional capital market infrastructure.