CONCEPT

DeFi Protocol Modelling and Liquidity Risk Training Course

19 – 23 September 2027
Riyadh - KAFD district five-star



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Ref: 980_22021 **Date:** 19 – 23 September 2027 **Location:** Riyadh - KAFD district five-star **Fees:** 20000 SAR

Introduction:

DeFi Decentralised Finance: The Future of Financial Services is a one-week course for treasury, investment, and risk management personnel, concluding with an institutional DeFi protocol evaluation model and liquidity risk workbook. Traditional financial institutions face severe operational and yield displacement as automated liquidity protocols, tokenised instruments, and smart contracts disintermediate conventional clearing, credit intermediation, and settlement rails. Participants already oversee corporate liquidity, capital allocation, or financial product compliance at work, advancing their technical mastery through hands-on modelling build exercises. CoreConcept Training Center delivers this course in DeFi Decentralised Finance: The Future of Financial Services.

Course Objectives:

- Analyse automated market maker mechanics and liquidity invariant curves using Python financial scripting tools
- Evaluate decentralized lending protocols and liquidation thresholds against institutional collateral management standards
- Calculate impermanent loss and yield farming net exposures using token economy audit methodologies
- Assess smart contract security vulnerabilities and flash loan exploit vectors using on-chain forensic analytics
- Structure real-world asset tokenisation models on distributed ledger networks adhering to enterprise client frameworks
- Assemble an institutional DeFi protocol evaluation model and liquidity risk workbook for risk committee governance

Target Audience:

- Treasury managers responsible for corporate cash deployment, tokenised yield structures, and protocol liquidity allocation
- Asset management professionals responsible for institutional digital asset portfolios and decentralised lending strategies
- Risk management specialists responsible for auditing protocol smart contracts, collateral ratios, and liquidation buffers
- Financial product development managers responsible for tokenising real-world assets and structuring decentralised capital rails
- Regulatory compliance officers responsible for monitoring decentralised transaction forensics, counterparty exposure, and custody standards

Course Outline:

Day 1: Decentralised Finance Infrastructure and Foundational Architectures

- Duke Fuqua DeFi Framework for Classifying Decentralised Financial Architecture
- Ethereum Virtual Machine Standards for Smart Contract Transaction Execution
- Linux Foundation Hyperledger Besu Architecture for Enterprise Settlement Systems
- Non-Custodial Web3 Wallets for Managing Institutional Cryptographic Keys
- Decentralised Oracles for Verifying External Financial Market Pricing

Day 2: Decentralised Primitives, Lending Markets and Liquidity Protocols

- Automated Market Maker Curves for Executing Algorithmic Liquidity Swaps
- Decentralised Lending Protocols for Calculating Collateralised Borrowing Factors
- Liquidation Waterfall Models for Managing Undercollateralised Protocol Defaults
- Algorithmic Stablecoin Architectures for Evaluating Currency Peg Stability Mechanisms
- Liquid Staking Frameworks for Generating Protocol Proof of Stake Yields

Day 3: Token Economy Audits, Quantitative Strategies and Settlement

- DEC Institute CDAA Framework for Assessing Digital Asset Valuation
- Python Financial Toolkits for Modelling Automated Market Maker Spreads
- Token Economy Audit Methods for Simulating Protocol Emission Schedules
- SciPy Algorithmic Packages for Calculating Impermanent Loss Sensitivities
- Distributed Ledger Interoperability Bridges for Executing Cross-Chain Value Settlement

Day 4: Protocol Risk Management, Exploit Forensics and Compliance

- Smart Contract Security Audits for Detecting Reentrancy Vulnerability Exploits
- On-Chain Forensic Tools for Tracking Flash Loan Arbitrage Sequences
- Oracle Manipulation Diagnostics for Mitigating Price Feed Distortion Events
- Institutional Custody Protocols for Securing Segregated Digital Asset Reserves
- Regulatory Reporting Frameworks for Tracing Decentralised Transaction Flows

Day 5: Modelling Build and Institutional Protocol Assessment Formulation

- Automated Market Maker Liquidity Stress Tests for Modelling Protocol Slippage
- Collateralised Debt Position Stress Tests for Simulating Liquidation Cascades
- Smart Contract Risk Scoring Matrices for Rating Protocol Counterparty Exposures
- Tokenised Real-World Asset Frameworks for Structuring Institutional Settlement Vehicles
- Institutional DeFi Protocol Evaluation Model and Liquidity Risk Workbook Completion

Skills You Will Gain:

- Automated Market Maker Invariant Modelling
- Impermanent Loss Risk Calculation
- Smart Contract Vulnerability Assessment
- On-Chain Forensic Flow Analysis
- Tokenised Asset Structure Evaluation
- Protocol Collateralisation Stress Testing
- Digital Asset Custody Assurance

Why Attend This Course:

- Present an institutional DeFi protocol evaluation model and liquidity risk workbook to the chief risk officer and investment committee to establish rigorous protocol deployment criteria.
- Decide whether proposed liquidity staking allocations, yield farming pools, or tokenised real-world asset structures meet institutional risk-adjusted return thresholds.
- Prevent capital impairment and unhedged balance sheet losses arising from flash loan oracle manipulations, smart contract reentrancy exploits, and automated market maker illiquidity.
- Instruct internal portfolio and compliance teams on testing decentralized protocol liquidity curves and auditing counterparty exposures against enterprise governance baselines.

Conclusion:

Upon returning to work, the participant enables the treasury and risk divisions to evaluate, govern, and deploy capital across decentralized financial protocols with institutional rigor. The investment committee and chief risk officer utilize the completed institutional DeFi protocol evaluation model and liquidity risk workbook to authorize on-chain allocations, establish collateral safety buffers, and approve tokenized asset structures. Following initial operational deployment, the department should review whether identified protocol vulnerabilities prevented capital exposure, evaluate forecast accuracy against realized invariant pool yields, and calibrate transaction monitoring thresholds.