

Trade Finance Fundamentals for Developers

Hours: 40 Hours

Course Overview

Trade Finance Fundamentals for Developers is a foundational course designed to help technology professionals understand how global trade finance works from both a business and systems perspective. The course bridges the gap between traditional banking concepts and modern technology implementations, enabling developers to confidently work on trade finance applications, integrations, and digital transformation initiatives.

Participants will gain a clear understanding of key trade finance instruments, end-to-end process flows, trade documents, and industry messaging standards such as SWIFT and ISO 20022. The course emphasizes how these concepts translate into real-world systems, data models, APIs, and workflows, with a strong focus on practical use cases rather than pure theory.

By the end of the course, learners will be able to interpret trade finance requirements, collaborate effectively with business and operations teams, and design or support technology solutions within trade finance ecosystems.

Target Audience

This course is ideal for:

- Software developers and engineers working on banking or fintech platforms
- Technical architects and system analysts involved in trade finance solutions
- API and integration developers supporting SWIFT, ISO 20022, or core banking systems
- QA, testing, and support professionals working on trade finance applications
- Product managers and business analysts with a technical background
- Fintech professionals entering the trade finance domain

Trade Finance Fundamentals for Developers

Module 1: Introduction to Trade Finance

- Overview of global trade and the need for trade finance
- Evolution of trade finance: traditional vs digital
- Common challenges in cross-border trade

- Role of technology and developers in trade finance
-

Module 2: Trade Finance Ecosystem & Stakeholders

- Importers, exporters, and counterparties
 - Roles of issuing, advising, confirming, and negotiating banks
 - Logistics providers, insurers, and inspection agencies
 - Fintechs and digital trade platforms
 - Developer touchpoints across the trade ecosystem
-

Module 3: Trade Finance Instruments – Fundamentals

- Letters of Credit (LC): concept, types, and use cases
 - Documentary Collections (DP / DA)
 - Bank Guarantees and Standby Letters of Credit (SBLC)
 - Open Account trade and Supply Chain Finance
 - Instrument selection from a system perspective
-

Module 4: End-to-End Trade Finance Process Flows

- Import and export transaction lifecycle
 - LC issuance, advising, confirmation, and amendment
 - Document presentation and checking process
 - Acceptance, settlement, and closure
 - Exception handling and manual interventions
-

Module 5: Trade Documents & Document Lifecycle

- Commercial documents (invoice, packing list, bill of lading)
- Transport, insurance, and inspection documents
- Financial and regulatory documents
- Document validation and discrepancy handling

- Digitization and electronic documents
-

Module 6: Trade Finance Rules & Practices

- Overview of UCP 600 and its application
 - URC 522 for documentary collections
 - ISP98 and URDG 758 basics
 - Impact of rules on system logic and workflows
-

Module 7: Messaging & Industry Standards

- SWIFT network overview for trade finance
 - Introduction to ISO 20022 for trade finance
 - Message sequencing and workflow mapping
-

Module 8: Trade Finance Systems Architecture

- Core trade finance system components
 - Integration with core banking and payment systems
 - Middleware, ESB, and message brokers
 - API-led trade finance architecture
 - Straight Through Processing (STP)
-

Module 9: Data Models & Application Design

- Trade finance master and reference data
 - Key data attributes for LCs, guarantees, and collections
 - Workflow orchestration and state management
 - Business rules and validations
 - Audit trails and traceability
-

Module 10: Risk Management & Compliance

- Operational and credit risks in trade finance
 - Country and counterparty risk
 - AML, KYC, and sanctions screening
 - Trade-Based Money Laundering (TBML) risks
 - System controls and preventive checks
-

Module 11: Charges, Calculations & Financial Logic

- Fees, commissions, and interest calculations
 - Margining and exposure management
 - FX handling and multi-currency settlements
 - Accounting and reconciliation touchpoints
 - Reversals and adjustments
-

Module 12: Digital Trade Finance & Innovation

- Electronic Letters of Credit (eLC)
 - Paperless trade initiatives
 - Blockchain and DLT in trade finance
 - Digital trade platforms and ecosystems
 - Smart contracts and automation
-

Module 13: Security & Data Protection

- Data confidentiality and integrity requirements
 - Role-based access control
 - Secure document storage and transmission
 - Regulatory expectations for data security
 - Business continuity and disaster recovery
-

Module 14: Testing, QA & Production Support

- Trade finance test scenarios and edge cases
 - SWIFT and third-party system simulation
 - User Acceptance Testing (UAT)
 - Production support and incident handling
 - Audit and regulatory readiness
-

Module 15: Reporting, Analytics & Dashboards

- Operational trade finance reports
 - Risk and compliance reporting
 - Regulatory reporting requirements
 - Management dashboards and KPIs
 - Data extraction and visualization
-

Module 16: Practical Use Cases & Developer Scenarios

- Building a Letter of Credit processing module
 - Automating document discrepancy checks
 - Integrating trade finance with payment rails
 - Designing APIs for trade finance services
 - End-to-end trade transaction walkthrough
-

Module 17: Future Trends & Developer Roadmap

- Standardization and interoperability
- AI and OCR in document processing
- Embedded trade finance and fintech partnerships
- Regulatory and market evolution
- Skills roadmap for trade finance developers