# Blockchain and Cryptocurrency Fundamentals Training Course

1 – 5 February 2027
Porto

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**Ref:** 880_166488 **Date:** 1 – 5 February 2027 **Location:** Porto **Fees:** 5700 Euro

## Overview

Blockchain and Cryptocurrency Fundamentals Training Course is a one-week course for business professionals, analysts, technology managers, finance staff, project teams, and decision-makers who leave with a Blockchain and Crypto Fundamentals Pack. Participants connect distributed ledgers, transactions, cryptography, consensus, wallets, tokens, smart contracts, market structure, custody, security, and risk. The course separates underlying technology from speculation and unsupported claims. Agile Leaders Training Center develops blockchain and cryptocurrency fundamentals practice.

## Who Should Attend

- Business functions responsible for evaluating blockchain or digital-asset proposals
- Finance and risk functions responsible for transactions, custody, controls, and exposure
- Technology functions responsible for architecture, security, and systems decisions
- Project functions responsible for requirements, stakeholders, and implementation planning
- Governance functions responsible for policy awareness, oversight, and responsible use

The course assumes participants regularly evaluate business or technology information; it leaves out coding, investment advice, trading strategies, and platform certification.

## Departments and Industries

The course supports departments and industries that assess blockchain systems, virtual assets, or digital transaction services.

- Finance, banking, payments, insurance, and fintech functions
- Technology, cybersecurity, data, and enterprise architecture teams
- Retail, ecommerce, supply chain, and digital-platform operations
- Public administration, education, professional services, and research organizations
- Audit, governance, legal, risk, and compliance functions

## Learning Objectives

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

- Analyze blocks, transactions, hashes, keys, and distributed-ledger structure.
- Compare consensus models and permissioned or permissionless networks.
- Use wallet, custody, token, and transaction lifecycle maps.
- Evaluate smart-contract, exchange, security, and operational risks.
- Apply risk-based governance and responsible-use controls.
- Build a Blockchain and Crypto Fundamentals Pack.

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## Course Agenda

## Day 1: Map Blockchain Foundations

- NIST IR 8202 Blockchain Component Map
- Block, Transaction, and Ledger Structure Diagram
- Cryptographic Hash and Digital Signature Flow
- Public and Private Key Responsibility Model
- Blockchain Suitability and Limitation Checklist

## Day 2: Examine Networks and Consensus

- Peer-to-Peer Node and Validation Map
- Permissioned and Permissionless Network Comparison
- Consensus Model Characteristics Matrix
- Fork, Upgrade, and Governance Decision Tree
- Network Incentive and Resource Tradeoff Grid

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## Day 3: Trace Cryptocurrency Operations

- Cryptocurrency Transaction Lifecycle Map
- Wallet Address, Key, and Signature Workflow
- Hot, Cold, and Third-Party Custody Comparison
- Token Function and Value-Transfer Model
- Exchange, Market, and Settlement Structure Diagram

## Day 4: Control Contracts and Risks

- Smart Contract State and Execution Model
- Data Oracle Trust and Failure Assessment
- Wallet, Exchange, Scam, and Key-Loss Risk Register
- Virtual-Asset Risk-Based Control Map
- Crypto Governance and Responsible-Use Checklist

## Day 5: Practice Blockchain and Crypto Decisions

- Exercise: Validate a Blockchain Transaction
- Exercise: Compare Consensus and Network Options
- Exercise: Diagnose a Wallet and Custody Failure
- Exercise: Evaluate a Crypto Service Risk Case
- Capstone: Blockchain and Crypto Fundamentals Pack

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## Practical Exercises

The course uses suggested activities based on payments, records, supply chains, digital platforms, and financial-service cases.

- Suggested activity: trace a signed transaction from creation through validation and ledger recording.
- Suggested activity: compare permission, consensus, performance, governance, and resource tradeoffs.
- Suggested activity: map wallet, custody, exchange, oracle, and smart-contract failure paths.
- Suggested activity: present a responsible-use decision with risks, controls, owners, and limitations.

## FAQs

### Who suits blockchain and cryptocurrency fundamentals training, and what does it assume?

Business, finance, technology, project, risk, and governance functions suit the training. It assumes regular evaluation of business or technology information and requires no coding background.

### How does blockchain and cryptocurrency fundamentals training differ from cryptocurrency trading training?

Blockchain and cryptocurrency fundamentals training explains technology, operations, wallets, custody, smart contracts, security, and governance, while trading training focuses on market positions and execution strategies that this course leaves out.

### How does a blockchain transaction work?

A blockchain transaction is created, digitally signed with a private key, broadcast to a network, checked under validation and consensus rules, and recorded in the distributed ledger when accepted.

### What is the difference between blockchain and cryptocurrency?

Blockchain is a distributed ledger structure and network process, while cryptocurrency is one type of digital value application that can use a blockchain for transactions and records.

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## What are the main cryptocurrency risks?

Cryptocurrency risks include price volatility, scams, key loss, custody failures, exchange dependencies, cyber incidents, smart-contract defects, operational errors, unclear governance, and misuse.

## Conclusion

Participants take back a Blockchain and Crypto Fundamentals Pack containing component maps, transaction flows, network comparisons, wallet and custody views, risk registers, and governance controls. It changes fragmented terminology into a structured decision language. The pack supports clearer evaluation, responsible use, and traceable discussion of blockchain and cryptocurrency proposals.