



London TDM

# Information Technology and Digital Transformation Training Courses

**Course Venue:** United Kingdom - London

**Course Date:** From 02 November 2025 To 06 November 2025

**Course Place:** London Paddington

**Course Fees:** 7,500 USD

## Introduction

Blockchain technology is revolutionizing various industries by enhancing security, transparency, and efficiency through decentralized systems. This 5-day course will provide in-depth knowledge of blockchain fundamentals, its architecture, and wide-ranging applications across different sectors.

## Objectives

- Understand the core concepts of blockchain technology.
- Explore the architecture and functioning of blockchain networks.
- Identify and analyze real-world blockchain use cases.
- Learn about blockchain related technologies like smart contracts and cryptocurrencies.
- Discuss future trends and challenges in blockchain technology.

## Course Outlines

### Day 1: Introduction to Blockchain Technology

- What is Blockchain? Overview and History
- Key Characteristics: Decentralization, Transparency, Security
- Types of Blockchains: Public vs. Private
- The Technology Stack: Consensus Algorithms, Cryptography
- The Role of Nodes and Miners

### Day 2: Architecture and Components

- Blocks and Chains: How Transactions Are Stored
- Distributed Ledger Technologies
- Consensus Mechanisms: PoW, PoS, and Others
- Introduction to Hash Functions
- Security Features: Immutability and Anonymity

### Day 3: Blockchain Platforms and Smart Contracts

- Popular Blockchain Platforms: Ethereum, Hyperledger, etc.
- Introduction to Smart Contracts
- Programming Smart Contracts: Solidity and Other Languages
- Legal and Ethical Considerations
- Decentralized Applications (DApps)

### Day 4: Use Cases Across Industries

- Finance and Cryptocurrencies: Bitcoin, Digital Payments
- Supply Chain Management and Provenance
- Healthcare: Data Security and Privacy
- Government and Public Services: Voting Systems
- Emerging Use Cases in Various Sectors

### Day 5: Future Trends and Challenges

- The Evolution of Blockchain Technology
- Scalability and Interoperability Issues
- Blockchain and Artificial Intelligence
- Regulatory and Compliance Challenges
- Exploring Future Potential and Innovations