

€ TRAINING

Build A Blockchain And A Cryptocurrency
From Scratch

A group of four smiling professionals (two men and two women) in a meeting setting, wearing white shirts. The image is partially obscured by a blue curved graphic element.

8 - 12 December 2024
Dubai (UAE)



Build A Blockchain And A Cryptocurrency From Scratch

REF: B1745 DATE: 8 - 12 December 2024 Venue: Dubai (UAE) - Fee: 5310 Euro

Introduction:

This training program provides participants with the essential knowledge and skills to build a blockchain and a cryptocurrency from scratch. It empowers them to understand the technical foundations, development processes, and practical applications of creating their own blockchain and cryptocurrency.

Program Objectives:

At the end of this program, participants will be able to:

- Understand the basic principles and components of blockchain technology.
- Design and implement a blockchain from the ground up.
- Develop and launch a custom cryptocurrency.
- Explore the security and regulatory considerations in blockchain and cryptocurrency development.
- Apply best practices for testing, deploying, and maintaining blockchain solutions.

Targeted Audience:

- Software Developers.
- Blockchain Enthusiasts.
- IT Professionals.
- Cryptocurrency Developers.
- Technology Entrepreneurs.

Program Outline:

Unit 1:

Understanding Blockchain Technology:

- Overview of blockchain technology and its key components.
- The concept of decentralization and distributed ledgers.
- Blockchain data structures: blocks, chains, and transactions.

- Consensus mechanisms: Proof of Work PoW and Proof of Stake PoS.
- Key features and benefits of blockchain technology.

Unit 2:

Designing and Building a Blockchain:

- Setting up the development environment.
- Designing the blockchain architecture.
- Implementing the blockchain data structure.
- Creating and managing blocks and transactions.
- Developing and testing the consensus algorithm.

Unit 3:

Creating a Cryptocurrency:

- Overview of cryptocurrency concepts and principles.
- Designing the cryptocurrency: coin supply, mining rewards, and distribution.
- Developing the cryptocurrency codebase.
- Implementing wallets and transaction processing.
- Steps for Launching and distributing the cryptocurrency.

Unit 4:

Security and Regulatory Considerations:

- Identifying and mitigating security risks in blockchain and cryptocurrency.
- Implementing cryptographic techniques for security.
- Understanding regulatory frameworks and compliance requirements.
- Addressing privacy and data protection concerns.
- Case studies on security breaches and regulatory actions.

Unit 5:



Deployment and Maintenance:

- Deploying the blockchain and cryptocurrency to a live environment.
- Monitoring and maintaining blockchain performance and security.
- Implementing upgrades and forks.
- Managing the cryptocurrency ecosystem and community.
- Future trends and innovations in blockchain and cryptocurrency development.