

# € TRAINING

Bitcoin and Cryptocurrency Technologies



6 - 10 October 2024  
Sharm El-Sheikh (Egypt)



# Bitcoin and Cryptocurrency Technologies

REF: B1746 DATE: 6 - 10 October 2024 Venue: Sharm El-Sheikh (Egypt) - Fee: 4095 Euro

## Introduction:

This training program provides participants with essential knowledge and skills in Bitcoin and cryptocurrency technologies. It empowers them to understand the foundational principles, technological frameworks, and practical applications of cryptocurrencies.

## Program Objectives:

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

- Understand the foundational principles of Bitcoin and other cryptocurrencies.
- Identify the technological components and workings of blockchain.
- Explore the applications and use cases of Bitcoin and cryptocurrencies.
- Recognize the regulatory and security considerations associated with cryptocurrencies.
- Apply knowledge to evaluate and implement cryptocurrency solutions.

## Targeted Audience:

- IT Professionals.
- Financial Analysts.
- Business Executives.
- Cryptocurrency Enthusiasts.
- Technology Consultants.

## Program Outline:

### Unit 1:

#### Introduction to Bitcoin:

- Overview of Bitcoin and its origin.
- Understanding Bitcoin's blockchain technology.
- The role of miners and the mining process.

- Bitcoin transactions and wallets.
- Key features and benefits of Bitcoin.

## Unit 2:

### Cryptocurrencies and Blockchain Technology:

- Basics of cryptocurrency and how it works.
- Overview of major cryptocurrencies besides Bitcoin Ethereum, Litecoin, etc..
- Blockchain architecture and its components.
- Consensus mechanisms Proof of Work, Proof of Stake.
- Security and privacy in blockchain and cryptocurrencies.

## Unit 3:

### Applications and Use Cases:

- Financial applications: Payments, remittances, and investments.
- Smart contracts and decentralized applications DApps.
- Supply chain management and transparency.
- Healthcare and identity verification.
- Real-world case studies of cryptocurrency applications.

## Unit 4:

### Regulatory and Legal Considerations:

- Legal status of Bitcoin and cryptocurrencies worldwide.
- Regulatory frameworks and compliance issues.
- Taxation and reporting requirements for cryptocurrency transactions.
- Anti-money laundering AML and know your customer KYC regulations.
- Case studies on regulatory actions and implications.

## Unit 5:



## Future Trends and Innovations:

- Emerging trends in cryptocurrency and blockchain technology.
- Decentralized finance DeFi and non-fungible tokens NFTs.
- The impact of quantum computing on blockchain security.
- Environmental sustainability of cryptocurrency mining.
- Future directions and potential developments in the cryptocurrency space.