

Bitcoin and Cryptocurrency Technologies

17 - 21 November 2024 Cairo (Egypt)



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REF: B1746 DATE: 17 - 21 November 2024 Venue: Cairo (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^{II}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.