

Business Blockchain BC-108

Duration: 3 days; Instructor-led Time: 9:00 AM – 5:00 PM

ABOUT THIS COURSE

This course is designed for non-technical business executives who are tasked with making business decisions about leveraging Blockchain technology in their businesses.

Armed with better information of the blockchain landscape, this course will help them rise to new challenges in their current role by giving them a new dimension on which they can add value to their employer.

This course provides general overview of Blockchain technology and is specifically designed to answer the following questions:

- What is Blockchain? (What exactly is it?)
- Non-Technical Technology Overview (How does it work?)
- Benefits of Blockchain (Why should anyone consider this?)
- Use Cases (Where and for what apps is it appropriate?)
- Adoption (Who is using it and for what?)
- Implementation (How do I get started?)
- Future of Blockchain (What is its future?)

OBJECTIVES

In this course, participants will learn about:

- The origins of Blockchain
- The basics of Blockchain and how it works
- What ledgers are and how is it used in Blockchain
- Different components that make up a Blockchain
- Many other types of Blockchain
- Bitcoin and how it started the crypto revolution
- Ethereum and other cryptocurrencies
- The rise of Decentralized Finance (DeFi)
- Hyperledger
- Current Blockchain use cases
- The future of Blockchain

Participants who attend this course will be able to demonstrate their ability to:

- Discuss blockchain technologies
- Describe blockchain works
- Understand why Blockchain is a transformative technology with potential for change around the world
- Understand how blockchain is solving problems that were difficult in the past
- Discuss blockchain use cases in production today

PREREQUISITES

No prerequisites.

AUDIENCE

This program is designed for the business professional who needs to understand the potential (or threat) of blockchain to their company and industry. This course is NOT appropriate for technology professionals seeking to gain deeper understanding of Blockchain technology implementation or programming level depth.

Target audience includes:

- IT Leadership
- Key Business Managers
- CEO/CTO/CIO
- Network Operations
- Business Analysts
- IT Consultants
- Project Managers
- Systems Integrators
- Help Desk / Service DeskManaged Service Providers
- Solution Providers
- Sales Staff
- Government Officials

COURSE CONTENTS

Module 1: Introduction to Blockchain

- Before Blockchain
- What is Blockchain
- Basic Principles of Blockchain
- How does Blockchain Work
- Technical Properties of a Blockchain
- There are many Blockchains

Module 2: Blockchain Mechanics

- Understanding Ledgers
- Cryptography
 - o Public Key Cryptography
 - o Cryptographic Hashing
- Peer-to-Peer Networking
- Transparency and Immutability

Module 3: Blockchain Functions

- Smart Contracts
- Blockchain Security
- Public and Permissioned Blockchains
- The Blockchain Transaction
- Consensus
 - o Proof of Work Consensus
 - o Proof of Stake Consensus
 - o Other Consensus Mechanisms Explained

Module 4: Blockchains and Governance

- Open-Source Code
- Governance
- Identity and Anonymity on Blockchain



Module 5: Types of Blockchains

- Public vs Private Blockchains
- Blockchain as a Service
- Blockchain Use Cases
- Notable Blockchain Projects

Module 6: Bitcoin and Blockchain

- The First Blockchain
- The Rise of Cryptocurrencies
- Decentralized Finance (DeFi)
- Non-Fungible Tokens (NFTs)
- Regulations on Cryptocurrencies

Module 7: Introduction to Ethereum

- History of Ethereum
- Blockchain as a Service
- How is Ethereum Used?

Module 8: Introduction to Hyperledger

- What is Hyperledger
- Hyperledger Modules and Platforms
- Hyperledger Fabric

Module 9: Other Blockchain Platforms

- Public Blockchains
 - o Cardano (ADA)
 - o Solana (SOL)
 - o EOS
- Private Blockchains
 - o Corda
 - o Ripple

Module 10: Blockchain Use Cases

- Blockchain in Practice
- Enterprise Solutions
- Public Sector Solutions
- Social Impact Solutions
- Platform Developer's Solutions
- End User Solutions
- Future of Blockchain

Module 11: Blockchain Problem Solving and Future Trends

- Problems Blockchain Solves
- Digital Currencies
- Future Trends