

Introduction to Blockchain

Description

Our world is becoming truly digital. We are entering the next generation of the information highway: all data is available, lineage-ready, and write-once and read-many. We have the ability to get to raw data as needed, on demand, all of which introduces a few new terms. One of them is blockchain. The term has been intriguing and challenging the data industry and its ability to provide answers to all the questions blockchain has raised. Obviously, there are a few wrinkles that need to be ironed and understood to make this concept become adopted and useful.

In this course we will discuss the concept of blockchain, the concept of cryptocurrency, smart contracts, and more. Beyond the technology, this course will introduce you to the philosophy behind decentralization and why there is so much excitement around it. During the first three modules, you'll be introduced to blockchain and the technology behind it. In Module Four, we'll go beyond bitcoin and delve deeper into a next-generation blockchain to introduce you to what modern blockchains can do. The use cases featured in the final module are drawn from real businesses.

Delegates will learn

- Blockchain Foundations
- The Technical Side
- Blockchain in Use
- Bitcoin and Ethereum
- Smart Contracts
- Implications on Traditional Businesses

Audience

Any developer and nondeveloper resources

Outline

Blockchain Foundations

- Why are People Excited About Blockchain?
- The Brief, Brief History of Blockchain
- The Move to Decentralization
- Ledgers, Distributed Ledgers, and Consensus
- What is Blockchain?

The Technical Side

- Cryptography
- Hash Functions
- Public Key Cryptography and Signing
- Blocks and Blockchain
- The Chain, Nodes and Network

Blockchain in Use

- Introduction
- Trust Framework and Consensus Mechanisms
- Public, Consortium, Private Blockchains
- Blockchain Interoperability
- When to Use a Blockchain (Limitations and Misconceptions)
- Implications of Blockchain on Traditional Business

Other Topics

- Introduction
- Bitcoin and Ethereum
- Smart Contracts
- Cryptocurrency Tokens
- Wallets and the Marketplaces
- Implications on Traditional Businesses