

## **Introduction to Blockchain Technology**

**Modality: Self-Paced Learning**

**Duration: 4 Hours**

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION: Learn, Master**

### ***About this course:***

This course proves to be an essential one for a beginner who wants to get a thorough introduction to all the aspects of blockchain. So, this course is about Introduction to Blockchain Technology. This is just a 4-hour short course but highly productive, as it covers all the topics and that you need to know about the components of blockchain. Blockchain is a facilitating technology for a workforce which provides the opportunity to the workforce to share records with each other without anyone being the sole authoritarian over the data. This highly facilitating technology eradicates the need for reconciling disparate ledgers. Blockchain technique is truly a groundbreaking technology. If your business comprises of any of these types like finance, insurance, IT, or logistics, blockchain becomes essential and useful to learn. You will also get to have a lesson on the difference between Blockchain and Cryptocurrency.

This course has been outlined in such a manner that it will give you a concise overview of all the important concepts in the blockchain. For the aspiring blockchain professionals, this course will serve as a good place to start, before they move forward to more advanced concepts like implementations, Proof of concepts, Ethereum programming, etc.

In this course, following areas will be essentially covered:

- Blockchain (definition)
- Cryptocurrency (definition)
- Variations between Blockchain and Bitcoin currency
- Ethereum (definition)
- Metamask (definition)
- Blockchain explorer (definition)
- Smart Contract (definition)
- A Blockchain as a Service (BAAS)
- Bitcoin or Litecoin Wallet (definition)
- Number of other demos and whiteboards

### ***Learning objectives:***

The course has the following learning objectives:

- Learning about the blockchain technology and its components in a short amount of time

- Defining blockchain and practically applying the learned technique on real world scenarios
- Defining cryptocurrency and giving variations between blockchains
- Enlisting a number of basic use cases for blockchains in business and the government departments
- Defining Ethereum and giving its differences from Bitcoin
- Defining Litecoin and explaining the method for receiving Litecoin funds via a wallet
- Going over the career outlook for blockchain experts
- Recognizing real industry applications and learning about the manner in which Blockchain is affecting real world at present
- Gaining a thorough understanding of the working of blockchain technology
- Defining Smart Contract and the method of incorporating in a business
- Defining Cryptographic Hash Function
- Comparing and contrasting the architectures of Hyperledger, Corda and Ethereum Platforms
- Defining Cryptographic Hash Function in blockchain

### ***Audience:***

This course is designed for and suitable for a number of groups. It is useful for those professionals who know about the influence of Blockchain on their respective workforce environment. This course can be taken by any such person who wants to gain an understanding on the working of blockchain technology. Students currently enrolled in colleges can also take this course if they wish to start a career in the Blockchain field. Or, this course is just for any such person (professional or non-professional) who wants to know the impact of blockchain technology on the market by learning through real case scenarios.

### ***Requirements:***

Since this course is of beginner level in the entire set, the requirements are not that strong or a lot. The requirements are minimum and basic. You should be having a good working computer with a browser that will take you to the mentioned links in the course. You should be able to read through the reference requirements given by the instructor to strengthen the learning. It is not needed but it would be very useful in the advanced learning if you have some experience in working in IT networking. Lastly, in order to reap the benefits of your learning fully, you should be having the interest and passion in you to learn the most groundbreaking technology in the market.

### **Course Outline:**

#### **Introduction**

- Introduction
- What is Blockchain Technology?
- Download Course Slides

#### **Blockchain 101**

- Cryptocurrency
- Terminology to Learn
- What is the Difference between Blockchain and Cryptocurrency?

- Blockchain Basics
- Blockchain Transactions
- Whiteboard - Blockchain Transactions
- Demo Block Explorer
- Demo- Hashing
- Components in a Blockchain
- Consensus and Mining

## **Blockchain 102**

- Blockchain Ledger
- Ethereum Basics
- Demo - Metamask
- Etherscan
- Smart Contracts
- Blockchain as a Service
- Demo - Blockchain as a Service

## **Uses Cases and Creating Value**

- Blockchain Use Cases
- Blockchain Use Cases Financial
- Blockchain Use Cases Dubai
- Creating Value with Blockchain

## **Bitcoin Overview**

- What is Bitcoin
- Bitcoin and Litecoin Wallets
- Demo - LTC Wallet Demo
- Mining as a Service - Genesis Mining
- Certified Blockchain Solutions Architect (CBSA) Exam