

# Blockchain Essentials

**2 Weeks / 40 Hrs. (4 Hrs. per day)**

**Medium of Instruction: Bilingual (English & Hindi)**

## Objective

Blockchain is an emerging technology that can radically improve banking, supply chain, and other transaction networks and can create new opportunities for innovation. The course would help the participants learn about blockchain for business and explore key use cases that demonstrate how the technology adds value.

Open to all

## Eligibility

## Prerequisite

- ✓ Candidate must have latest computer/laptop
- ✓ Internet connection

Rs. 1500/- + GST

## Course Fees

## Certificate

Certificate will be provided to the participants after the online test, conducted at the end of the course.

- ✓ Instructor-led live classes
- ✓ Instructor-led hands-on lab sessions.
- ✓ Content Access through e-learning portal
- ✓ Assessment and Certification

## Methodology

## Intended Users

The users can be people enthusiastic to gain knowledge about the technology as it is growing rapidly in its popularity. The course is designed to be a ground-up approach where Blockchain and its applications will be discussed. Anyone who wants to get started in Blockchain and wants to go for more advanced courses would benefit from this course.

- ✓ The learner will learn the blockchain key elements and gain a knowledge of the technology. Further, the learner will dive into the various use cases, applications and types of blockchains.

## Outcome

## Course Content

### Blockchain Essentials

- *Blockchain – fundamentals, evolution-history, uses, application areas,*
- *Bitcoin*
- *Introduction to Cryptography, concept of Public-Private key, Digital Signature, Digital Certificates*
- *Blockchain components and applications, Blocks, transactions, Distributed Ledger, mining, proof of work, consensus*
- *Public vs Private Blockchain*
- *Introduction to mining, transactions*
- *Introduction to Ethereum, Concept of Smart Contract, Ether wallet*
- *Introduction to Solidity for writing smart contracts.*
- *Decentralized Applications – DApps*
- *Introduction to HyperLedger*

### Faculty

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