

CET Blockchain Fundamentals

Course Duration : 24 Hours

Course code : CET-BF

1. Course Overview

The CET Blockchain Fundamentals course provides a strong foundation in blockchain technology, its architecture, and real-world applications. This course is designed for beginners and professionals who want to understand how blockchain works, including distributed ledgers, consensus mechanisms, smart contracts, and use cases across industries. Learners gain practical insights into blockchain security, governance, and emerging trends shaping decentralized systems.

2. What you'll learn?

- Blockchain fundamentals and core concepts
- Distributed ledger technology and consensus models
- Cryptography basics used in blockchain
- Smart contracts and decentralized applications (DApps)
- Blockchain security, governance, and compliance
- Real-world blockchain use cases and industry adoption

3. Target Audience

- Beginners interested in blockchain technology
- IT professionals exploring emerging technologies
- Developers, analysts, and consultants
- Business and technology decision-makers
- Students and graduates pursuing blockchain careers

4. Pre-Requisites

- Basic computer and internet knowledge
- No prior blockchain or programming experience required

5. Course Content (Modules)

Module 1: Introduction to Blockchain Technology

- Blockchain concepts and history
- Centralized vs decentralized systems

Module 2: Blockchain Architecture and Components

- Blocks, transactions, and nodes
- Consensus mechanisms (PoW, PoS, etc.)

Module 3: Cryptography and Security in Blockchain

- Hashing and digital signatures
- Blockchain security fundamentals

Module 4: Smart Contracts and DApps

- Smart contract basics
- Introduction to decentralized applications

Module 5: Blockchain Use Cases and Governance

- Blockchain in finance, supply chain, and healthcare
- Governance models and regulatory overview