

# **BLOCKCHAIN DEVELOPER**



## **Course Objective**

The objective of this course is to provide beginners with the knowledge and skills needed to become a blockchain developer. By the end of the course, participants should be able to build a basic DApp and have a strong foundation in blockchain development concepts.



## **Suitable For**

This course is designed for individuals who have a basic understanding of programming but are new to blockchain development. It is suitable for:

Software developers looking to transition into blockchain development. Entrepreneurs and innovators interested in building blockchain-based applications.

Tech enthusiasts eager to explore blockchain development. Students and professionals seeking a career in blockchain technology.



## **Course Highlights**



Participants will build a simple DApp during the course to apply what they've learned.



Focus on real-world development skills that can be immediately applied.

Instructor Guidance

Detailed guidance and support from experienced blockchain developers.

Peer Learning

Collaborative exercises and discussions to enhance learning.
Certificate of Completion: Certificate of Completion: Online Test Evaluation



## **Modules**

## 1.Introduction to Blockchain Development

- Basics of Blockchain Technology
- Development Tools and Environments
- Setting Up Development Environment

#### 2.Ethereum and Smart Contracts

- Ethereum Platform Overview
- Solidity Programming Language
- Writing and Deploying Smart Contracts
- Interacting with Smart Contracts

#### 3.Decentralized Application (DApp) Architecture

- Understanding DApps
- DApp Components (Frontend, Backend, Smart Contracts)
- Web3.js: Interaction between DApp and Blockchain





#### 4. Building a Simple DApp

- Ideation and Project Planning
- Creating the Frontend (HTML, CSS, JavaScript)
- Developing the Smart Contract
- Integrating Web3.js
- Testing and Deployment
- User Interface Design and User Experience (UI/UX)

#### **5.Advanced Topics**

- Security Best Practices (Avoiding Common Vulnerabilities)
- Gas Optimization
- IPFS and Decentralized Storage
- Oracles and Real-World Data Integration
- Scaling Solutions (e.g., Layer 2)

#### 6.Ethereum Development Ecosystem

- Ethereum Improvement Proposals (EIPs)
- Ethereum Development Tools (Truffle, Remix, Hardhat)
- Other Blockchain Platforms (e.g., Binance Smart Chain, Solana)



#### 7. Final DApp Project and Presentations

- Participants work on a more complex DApp project
- Project presentations and feedback

#### **8.Conclusion and Next Steps**

- Review of Key Concepts
- Discussing Career Opportunities in Blockchain Development

#### 9. Final test and Evaluation

Final Certification delivery



This **30-**hour Beginner Level Blockchain Developer Course will provide participants with hands-on experience in building a simple DApp and equip them with the knowledge and skills needed to pursue a career in blockchain development.