



BLOCKCHAIN AND ACCOUNTING

(Creating Best of Minds)

Advanced Certificate in Blockchain and Digital Accounting

Course Code: BF_IP_I_0024/25

Duration: 40 Hours

Delivery Format: Hybrid

Target Audience:

- **Fresher (Beginners):** Perfect for those new to blockchain and accounting, providing foundational knowledge of blockchain's impact on financial systems.
- **Professionals:** Designed for accountants and finance experts who want to integrate blockchain into their practices.
- **Entrepreneurs/Business Owners:** Useful for anyone looking to improve business operations, especially in finance and supply chain management.

Program Objectives:

- **Understand Blockchain Technology:** Gain a strong foundational understanding of how blockchain works and its applications within accounting.
- **Analyze Blockchain Applications in Accounting:** Learn how blockchain can be applied to supply chain management, inventory tracking, and the automation of transactions.
- **Implement Smart Contracts:** Explore the use of smart contracts to enhance business processes and ensure transparent, automated transactions.
- **Explore Decentralized Finance (DeFi):** Understand the role of decentralized finance in transforming traditional financial systems and its implications for accounting.

- Build Practical Skills: Equip learners with practical knowledge to integrate blockchain tools into accounting systems effectively.

Detailed Syllabus

Module 1: Introduction to Blockchain

Objective: Provide a foundational understanding of blockchain technology.

Topics:

- Overview of Blockchain Technology
- Key Concepts: Blocks, Chains, Nodes, Miners
- Consensus Mechanisms: Proof of Work vs. Proof of Stake
- Blockchain Security & Cryptography

Activities:

- Interactive lectures on blockchain fundamentals.
- Discussions on the applications of blockchain in various industries.

Assessments:

- Quiz on blockchain terminology and concepts.
- Short report on the security aspects of blockchain.

Module 2: Smart Contracts in Accounting

Objective: Explore the use of smart contracts in accounting practices.

Topics:

- What Are Smart Contracts?
- How Smart Contracts Work
- Use Cases of Smart Contracts in Accounting
- Automating Transactions and Reducing Human Error

Activities:

- Demonstrations of smart contract functionalities.
- Case study analysis of smart contract applications in accounting.

Assessments:

- Assignment on designing a smart contract for a specific accounting process.
- Presentation on the benefits and challenges of smart contracts.

Module 3: Decentralized Finance (DeFi)

Objective: Understand the impact of Decentralized Finance (DeFi) on traditional accounting.

Topics:

- Introduction to DeFi
- Blockchain in Traditional Finance vs. Decentralized Finance
- Impact of DeFi on Accounting and Financial Markets

Activities:

- Discussions on the principles of DeFi.
- Comparative analysis of traditional finance and DeFi.

Assessments:

- Report on the implications of DeFi for accounting practices.
- Essay on the future of finance with DeFi.

Module 4: Blockchain in Supply Chain & Inventory Management

Objective: Learn how blockchain improves transparency and efficiency in supply chain and inventory management.

Topics:

- Blockchain for Transparency in Supply Chains
- Real-Time Inventory Management with Blockchain
- Case Study: Blockchain Implementation in Supply Chain Management

Activities:

- Case study analysis of blockchain in supply chain management.
- Simulations of inventory tracking using blockchain.

Assessments:

- Assignment on designing a blockchain solution for supply chain transparency.
- Presentation on the benefits of blockchain in inventory management.

Module 5: Blockchain Implementation in Accounting

Objective: Provide practical knowledge on integrating blockchain into accounting systems.

Topics:

- Blockchain Tools for Accountants
- Integrating Blockchain into Accounting Systems
- Blockchain and Auditing Practices
- Blockchain's Role in Crypto-Assets Accounting

Activities:

- Hands-on sessions with blockchain tools for accounting.
- Discussions on the impact of blockchain on auditing.

Assessments:

- Project on implementing blockchain in a simulated accounting system.
- Report on the challenges and solutions for blockchain integration.

Module 6: Hands-On Practice and Case Studies

Objective: Apply blockchain concepts through practical exercises and real-world case studies.

Topics:

- Practical Exercises on Blockchain Tools
- Case Studies on Blockchain in Accounting
- Deployment of Smart Contracts
- Real-World Scenarios and Solutions

Activities:

- Practical exercises on deploying smart contracts.
- Group projects analyzing blockchain implementation case studies.

Assessments:

- Case study presentation and analysis.
- Project report on a real-world blockchain application in accounting.