



**ROLASOFT PROFESSIONAL COMPUTER & IT
COURSES VERSION 2.0 LATEST**

Diploma in Certified Blockchain Developer

*Become a job-ready Blockchain Developer in 6
months!*



Benefits of Studying Diploma in Blockchain with RolaSoft

✓ 1. Industry-Relevant Curriculum

Stay ahead with a syllabus designed by industry experts, focused on real-world applications of blockchain.

✓ 2. Hands-On Training

Learn by doing — build real-time projects, and gain practical experience.

✓ 3. Experienced Instructors

Gain insights from certified professionals and senior software engineers with years of teaching and industry experience.

✓ 4. Placement Assistance

Access job support services including resume building, mock interviews, and direct placement opportunities with partner companies.

✓ 5. Flexible Learning Modes

Choose between: **Online**, **Offline (at our center)**, or **Hybrid Classes**

Benefits of Studying Diploma in Blockchain with RolaSoft

✓ 6. Mini & Major Projects

Work on individual and group projects to strengthen your portfolio and impress future employers.

✓ 7. Certification Upon Completion

Earn a **Diploma Certificate** from **RolaSoft Technologies**, recognized by IT recruiters and employers.

✓ 8. Small Batch Size

Personalized attention and better interaction in small groups for an enhanced learning experience.

✓ 9. Affordable Fees & Installment Plans

Top-tier training at a reasonable cost, with flexible payment options.

✓ 10. Career-Oriented Skills You'll Gain at RolaSoft Technologies

RolaSoft ensures you're job-ready with the right tech stack and practical knowledge.

Diploma in Blockchain Course Details

- ✓ **Duration**
Six (6) Months
- ✓ **Schedule**
Weekdays / Weekends
- ✓ **Learning Modes**
Online, Offline (at our center), or Hybrid Classes
- ✓ **Start Date**
New batches start every month — enroll now!
- ✓ **Eligibility**
No prior experience required

Blockchain Prerequisites

- ✓ Basic knowledge of mathematics and logical reasoning
- ✓ Basic knowledge of **Programming (JavaScript, Python, or Solidity)** is helpful but not mandatory.
- ✓ Understanding of data structures and algorithms (helpful but not required)
- ✓ Familiarity with cryptographic concepts (recommended but not mandatory)

Diploma in Blockchain – Program Details

Program Overview

The **Blockchain** course at ***Rolasoft Technologies*** is a comprehensive 6-month program designed to teach students about blockchain fundamentals, cryptocurrencies, decentralized applications (DApps), and smart contract development. Students will learn how blockchain works, how to develop blockchain solutions, and how to integrate them with real-world use cases.

The course covers key blockchain platforms such as **Ethereum** and **Hyperledger** and provides practical training in **Solidity** (the programming language for Ethereum smart contracts). Additionally, students will work with blockchain-based tools and technologies, understand consensus algorithms, and explore the potential applications of blockchain in various industries such as finance, healthcare, supply chain, and more.

By the end of the course, students will have the skills to design, develop, and deploy decentralized applications and smart contracts, with an understanding of blockchain's impact on various sectors.

Diploma in Blockchain Course Curriculum

Month 1: Introduction to Blockchain Technology

✓ What is Blockchain?

(Overview of Blockchain technology and its history, Understanding decentralized networks and distributed ledger technology, Key components of blockchain: Blocks, Hashing, Consensus Algorithms, and Miners, Introduction to cryptocurrencies (Bitcoin, Ethereum, etc.))

✓ Blockchain Architecture

(Understanding blockchain structure and protocols, Public vs Private Blockchains, Blockchain Consensus Mechanisms: Proof of Work (PoW), Proof of Stake (PoS), and more)

✓ Smart Contracts

(Introduction to smart contracts and their role in blockchain, How smart contracts work and their applications, Overview of Ethereum blockchain and smart contract ecosystem)

✓ Hands-On: Set up a basic blockchain and understand how transactions are created and verified

Diploma in Blockchain Course Curriculum

Month 2: Blockchain Development Platforms & Tools

✓ **Ethereum Blockchain & Smart Contracts**

(Introduction to Ethereum and the Ethereum Virtual Machine (EVM), How Ethereum differs from other blockchains, Ethereum's role in smart contracts and Dapps)

✓ **Solidity Programming**

(Basics of Solidity (the most popular language for writing smart contracts), Writing simple smart contracts in Solidity, Deploying contracts on the Ethereum blockchain)

✓ **Development Tools**

(Setting up the Ethereum development environment (Truffle Suite, Remix IDE), Testing smart contracts and working with Ethereum testnets, Using MetaMask and Infura for interacting with the Ethereum blockchain)

✓ **Hands-On:** Write and deploy your first smart contract on the Ethereum testnet

Diploma in Blockchain Course Curriculum

Month 3: Advanced Smart Contracts & Decentralized Applications (DApps)

✓ Advanced Smart Contract Development

(Handling data storage, variables, and modifiers in Solidity, Creating and interacting with events and mappings in smart contracts, Best practices for developing secure and efficient smart contracts)

✓ Building Decentralized Applications (DApps)

(Understanding the architecture of DApps, Frontend and backend integration for DApps (Web3.js, Ethers.js), Interacting with smart contracts from web applications)

✓ Security in Smart Contracts

(Common security issues in smart contracts (reentrancy, overflow, etc.), Tools and techniques for smart contract auditing)

✓ Hands-On: Build a simple DApp that interacts with a smart contract

Diploma in Blockchain Course Curriculum

Month 4: Blockchain Platforms & Hyperledger

✓ Hyperledger Frameworks

(Introduction to Hyperledger: Hyperledger Fabric, Sawtooth, and Indy, Use cases for Hyperledger and its role in enterprise blockchain, Setting up a private blockchain network with Hyperledger Fabric)

✓ Blockchain Consensus Algorithms

(Deep dive into various consensus mechanisms: PoW, PoS, Delegated Proof of Stake (DPoS), etc., Hyperledger Fabric's consensus model (Practical Byzantine Fault Tolerance - PBFT), Comparing different consensus algorithms and their strengths/weaknesses)

✓ Private vs Public Blockchain

(Understanding the differences between private, consortium, and public blockchains, Pros and cons of using a private blockchain in business applications)

✓ Hands-On: Set up a private blockchain network using Hyperledger Fabric

Diploma in Blockchain Course Curriculum

Month 5: Blockchain Use Cases & Industry Applications

✓ **Blockchain in Finance and Cryptocurrency**

(How blockchain powers cryptocurrencies like Bitcoin and Ethereum, Blockchain-based financial services: Decentralized Finance (DeFi), Smart contract use cases in banking, insurance, and trading)

✓ **Blockchain in Supply Chain**

(How blockchain can revolutionize supply chain management, Transparency, traceability, and real-time tracking with blockchain, Use case examples from logistics and supply chain industries)

✓ **Blockchain in Healthcare**

(Blockchain applications in healthcare data management and patient privacy, Smart contracts for healthcare services and insurance claims)

Diploma in Blockchain Course Curriculum

✓ **Blockchain in Government & Voting**

(Blockchain applications in voting, identity management, and public records, How blockchain can improve government transparency and accountability)

✓ **Hands-On:** Develop a use case for blockchain in supply chain or finance and implement a simple prototype

Diploma in Blockchain Course Curriculum

Month 6: Blockchain Challenges, Future Trends & Career Preparation

✓ **Blockchain Challenges**

(Scalability challenges and solutions (sharding, layer-2 solutions, etc.), Interoperability between different blockchains, Blockchain governance and regulation)

✓ **Emerging Blockchain Trends**

(The rise of NFTs (Non-Fungible Tokens) and their applications, Decentralized finance (DeFi) and the future of financial services, Blockchain and Internet of Things (IoT) integration)

✓ **Hands-On:** Final Project: Develop a blockchain-based solution for a real-world problem and present it to the class

Tools & Technologies Used

Tools & Technologies Used for **Certified Blockchain Developer** Course are:

- ✓ **Blockchain Platforms:** Ethereum, Hyperledger Fabric
- ✓ **Smart Contract Development:** Solidity, Truffle Suite, Remix IDE
- ✓ **Decentralized Application Development:** Web3.js, Ethers.js
- ✓ **Tools for Deployment & Testing:** MetaMask, Infura, Ganache
- ✓ **Blockchain Frameworks:** Hyperledger, IPFS
- ✓ **Other Tools:** Ganache, Geth, Parity, Solidity Auditing Tools

Final Capstone Project (End of 6 Months)

Students will complete an **industry-level project** in **Certified Blockchain Developer** :

- ✓ Develop a blockchain-based solution for a real-world problem and present it to the class (Capstone Project)

Blockchain Learning Outcomes

By the end of this course, students will be able to:

- ✓ Understand the core concepts of **blockchain technology** and **cryptocurrencies**
- ✓ Develop **smart contracts** using **Solidity** and deploy them on **Ethereum**
- ✓ Build **decentralized applications (DApps)** that interact with blockchain networks
- ✓ Work with popular **blockchain platforms** like **Ethereum** and **Hyperledger**
- ✓ Implement **blockchain solutions** for real-world use cases in various industries
- ✓ Understand the emerging trends in **Decentralized Finance (DeFi)**, **NFTs**, and **blockchain scalability**
- ✓ Prepare for careers in **blockchain development**, **consulting**, and **entrepreneurship**

Certification Obtain

After completion of the program, the student will be awarded with a certificate:

Diploma in Certified Blockchain Developer

The program also prepares students for industry certifications such as:

- ✓ Certified Blockchain Developer™ – Blockchain Council
- ✓ Certified Blockchain Expert™ – Blockchain Council
- ✓ Blockchain Specialization – University of Buffalo (via Coursera)
- ✓ Blockchain Developer Nanodegree – Udacity Blockchain Developer Nanodegree – Udacity
- ✓ Certified Blockchain Security Professional (CBSP) – EC-Council
- ✓ IBM Blockchain Foundation Developer

Blockchain Career Opportunities

- ✓ Blockchain Developer (Core)
- ✓ Smart Contract Developer
- ✓ Blockchain Frontend Developer (Web3 Frontend)
- ✓ Blockchain Backend Developer
- ✓ Blockchain Architect
- ✓ Crypto Security Engineer / Auditor
- ✓ NFT/GameFi Developer

Who Should Take This Blockchain ?

Who Should Take This **Certified Blockchain Developer** ?

- ✓ **Software developers** interested in learning blockchain and DApp development
- ✓ **Entrepreneurs** and business owners looking to understand blockchain technology for potential use cases
- ✓ **IT professionals** seeking to transition into blockchain-related roles
- ✓ **Students** or individuals interested in the cryptocurrency and blockchain space
- ✓ **Tech enthusiasts** looking to explore new and emerging technologies

Rolasoft Technologies Services

Rolasoft Technologies – Services Offered

✓ **SOFTWARE DEVELOPMENT COMPANY**

(MOBILE APPLICATION, WEB APPLICATION, DESKTOP APPLICATION, CUSTOMIZED APPLICATION, E-COMMERCE WEBSITE)

✓ **PROFESSIONAL COMPUTER AND IT EDUCATION**

(TOP-UP PROGRAMS, DIPLOMA PROGRAMS, CERTIFICATE PROGRAMS, TECH @ SCHOOL, CORPORATE PROGRAMS, SIWES PROGRAMS, CUSTOMIZED PROGRAMS)

✓ **DIGITAL ADVERTISING AND BUSINESS BRANDING**

(SOCIAL MEDIA MARKETING, EMAIL MARKETING, CONTENT MARKETING, WEBSITE SEO, BRANDED CLOTHING, STICKERS AND TAG, CUSTOM BRANDING, AND MANY MORE)

✓ **INTERNATIONAL UNIVERSITY ADMISSION PROCESSING**

(AMERICA, UK, CANADA, EUROPE, AFRICA, AND MANY MORE)

Contact & Registration

 Phone: +234 8032867212, +234 8082171242

 Email: info@rolasofttech.com

 Website: www.rolasofttech.com

 Address: 2, Martins Street Off Ojuelegba Road, Yaba, Lagos State.



Enroll Today & Start Your Blockchain Developer Journey!
Shape your future with Blockchain Developer.