

### **CONTENTS**

1. Introduction to Full Stack

Blockchain Development

2. Why Choose Chools?

- 3. Who Can Apply?
- 4. Program Overview
- 5. Objectives and Outcomes
- 6. Skills Learned
- 7. Job Positions and Opportunities
- 8. Key Industry Verticals
- 9. Program Outline
  - Stage 1: Fundamentals of Blockchain Technology
  - Stage 2: Advanced Blockchain Development
  - Stage 3: Smart Contracts and Protocols
  - Stage 4: Cryptography and Security
  - Elective Modules
- 10. Enrollment Information



# INTRODUCTION TO FULL STACK BLOCKCHAIN DEVELOPMENT

Hello, aspiring blockchain developer! The Full Stack Blockchain Developer program at Chools teaches you how to develop applications that use blockchain technology—a system of distributed, decentralized, and immutable records of transactions. As a full stack blockchain developer, you will work with both the frontend and backend of a blockchain application, as well as the smart contracts, protocols, and cryptography involved.



### Why Choose Chools?

### **Numbers That Speak for Themselves:**

- 10,000+ Successful Alumni: Join a network of impactful professionals.
- 95% Job Placement Rate: Secure your future with Chools' proven track record.
- 20+ Years of Excellence: Trust in a legacy of education and industry expertise.
- 200+ Industry Partnerships: Leverage our connections for real-world insights and opportunities.

### **What Sets Us Apart?**

- **Expert Instructors:** Learn from industry veterans with hands-on experience.
- Hybrid Learning Model: Balance online flexibility with in-person engagement.
- Comprehensive Curriculum: Stay ahead with courses designed meet market demands.
- Community and Networking: Be part of an active community of learners and professionals.

### Why Can Apply?

### **Eligibility Criteria:**

- Educational Background: A bachelor's degree in any subject, preferably with a STEM background.
- Skills: Good command of English, as the course is taught online in English.



- Work Experience: A minimum of 1 or 2 years of working experience in designing and deploying applications on the blockchain platform.
- Technical Skills: Expertise in at least one high-level programming language, ability to identify the requirements of an application, defining best practices for securing, governing, and administering blockchain.

### **Program Overview**

The Full Stack Blockchain Developer Program at Chools provides an extensive education in blockchain development. Our curriculum covers a wide range of topics to ensure a thorough understanding, combining theoretical knowledge with practical, hands-on experience.

### **Learning Mode:**

- Hybrid Learning Model: Combines online learning with in-person sessions for flexibility and interactive engagement.
- Interactive Sessions: Includes live webinars, workshops, and Q&A forums with expert instructors and peers.
- Self-paced Learning: Access course materials anytime, allowing you to learn at your own pace.



### **Skills Learned**

- Web Analytics Fundamentals: Understanding core web analytics concepts and strategies.
- Tool Configuration: Setting up and configuring web analytics tools like Google Analytics, Adobe Analytics, and Microsoft Clarity.
- Data Analysis: Analyzing web analytics data to understand audience behavior and preferences.
- User Experience Optimization: Improving website design, usability, and user experience based on analytics insights.
- Marketing Strategy Optimization: Using web analytics data to optimize online marketing strategies and KPIs.
- **Technical Skills:** Implementing tracking codes, setting up goals, and creating custom reports.
- **Reporting and Visualization:** Creating clear and actionable web analytics reports and dashboards.

### **Job Positions and Opportunities**

### **Career Paths:**

- Web Analytics Specialist
- Digital Marketing Analyst
- SEO Analyst
- Data Analyst
- Conversion Rate Optimization (CRO) Specialist
- Marketing Manager

### **Industry Demand:**

- High demand across various sectors
- Competitive salaries
- Strong growth potential

## Key Industry Verticals Skill Application Areas:

- Technology
- Finance
- Healthcare
- Retail
- Marketing
- Telecommunications
- Education
- Logistics and Supply Chain
- Government and Public Services

### **Curriculum Highlights:**

- Fundamental Knowledge: Core principles of blockchain technology.
- Advanced Techniques: In-depth understanding of blockchain development and best practices.
- Real-World Applications: Practical projects and case studies.
- Professional Development: Continuous learning and networking opportunities.

By completing the Full Stack Blockchain Developer Program at Chools, you'll gain the skills, knowledge, and experience needed to excel in blockchain development, positioning yourself as a valuable asset to any organization.

### **Program Objectives**

- Master technical skills in blockchain development.
- Implement best practices for designing, developing, and managing blockchain applications.
- Explore various blockchain platforms and tools.
- Address real-world blockchain challenges.
- Understand best practices in blockchain security, governance, and cryptography.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in blockchain development.

### **Expected Outcomes**

- Proficiency in blockchain development tools and techniques.
- Practical experience through hands-on projects.
- Strong analytical and problem-solving skills.
- Application of best practices in blockchain development.
- Innovation in blockchain solutions and applications.





# PROGRAM OUTLINE

### Stage 1: Fundamentals of Blockchain Technology

#### 1. Introduction to Blockchain

- Core principles and architecture of blockchain technology.
- Key components and functionalities of blockchain.
- Benefits and challenges of using blockchain for applications.

#### 2. Blockchain Platforms Overview

- Exploring major blockchain platforms: Reuther, Hyper ledger, etc.
- Comparing features, services, and use cases.
- Selecting the appropriate platform for specific needs.

### Stage 2: Advanced Blockchain Development

#### 3. Smart Contract Development

- Developing and deploying smart contracts on various blockchain platforms.
- Understanding smart contract languages such as Solidity.
- Best practices for smart contract security and auditing.

### 4. Frontend and Backend Integration

 Building and integrating frontend and backend components for blockchain applications.

- Using frameworks and tools for efficient development.
- Best practices for seamless integration
- and performance optimization.

#### Stage 3: Smart Contracts and Protocols

#### 5. Blockchain Protocols and Standards

- Understanding and implementing blockchain protocols and standards.
- Exploring consensus mechanisms such as PoW, PoS, etc.
- Case studies and real-world applications.

#### 6. Advanced Smart Contract Techniques

- Advanced techniques for developing and optimizing smart contracts.
- Implementing complex logic and functionality in smart contracts.
- Ensuring scalability and efficiency of smart contracts.

#### Stage 4: Cryptography and Security

#### 7. Cryptography in Blockchain

- Applying cryptographic principles to ensure blockchain security.
- Understanding encryption, digital signatures.
- Best practices for implementing cryptographic solutions.





# PROGRAM OUTLINE

### 8. Blockchain Security and Governance

- Implementing security measures for blockchain applications.
- Best practices for securing blockchain networks and data.
- Understanding governance frameworks for blockchain.

#### **Elective Modules**

### 9. Data Ethics and Privacy

 Ethical considerations, privacy laws, and compliance strategies.

### 10. Al Integration for Blockchain

• Implementing AI solutions in blockchain applications.

#### 11. Big Data Solutions with Blockchain

 Managing big data applications using blockchain technology.

### 12. Blockchain DevOps Practices

CI/CD pipelines, automation, containerization for blockchain development.

### 13. Blockchain Project Management

blockchain Leading projects and ensuring successful delivery.

#### 14. IoT Integration with Blockchain

 Integrating blockchain solutions with IoT devices.

### **Enrollment Now Open!**

Take the first step towards becoming a blockchain expert. Enroll in our Full Stack Blockchain Developer Program and enhance your career with Chools.