



# IT TUTOR PRO BLOCK CHAIN CATALOG

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# CERTIFIED BLOCKCHAIN DEVELOPER - HYPERLEDGER (CBDH)



51 Videos



3.6 Hours



20 Test Questions

## COURSE DESCRIPTION:

### Certified Blockchain Developer – Hyperledger (CBDH)

The CBDH certification validates a developer's expertise in designing and implementing blockchain solutions using Hyperledger frameworks. Hyperledger is an open-source collaborative effort created to advance cross-industry blockchain technologies. This certification ensures that developers possess the necessary skills to develop decentralized applications (dApps) and smart contracts using Hyperledger Fabric and other related tools.

### KEY FEATURES:

**Focused Expertise:** CBDH focuses specifically on Hyperledger frameworks, distinguishing it from more generalized blockchain certifications.


**Hands-On Skills:** The certification assesses practical skills in developing and deploying blockchain solutions, including smart contracts, using Hyperledger tools.

**Industry Relevance:** Hyperledger is widely adopted across various industries, including finance, supply chain, healthcare, and more, making CBDH valuable for professionals in these domains.

**Recognition:** Issued by the Blockchain Training Alliance (BTA), the CBDH is recognized globally as a mark of proficiency in Hyperledger development.

**Career Advancement:** Holding the CBDH certification can enhance career opportunities and credibility in blockchain development roles, particularly those involving Hyperledger frameworks.

# CERTIFIED BLOCKCHAIN DEVELOPER - HYPERLEDGER (CBDH)



Overall, CBDH is tailored for developers aiming to specialize in enterprise-grade blockchain solutions using Hyperledger technologies, providing them with both theoretical knowledge and practical skills required in the industry.

## COURSE SYLLABUS:

### Module 1 : Certified Blockchain Developer Hyperledger Overview

- 1.1 Course Introduction
- 1.2 Module 1 Introduction
- 1.3 Audience for the Certification
- 1.4 What is a CBDH
- 1.5 Exam Objectives
- 1.6 Exam Overview

### Module 2 : Hyperledger Framework

- 2.1 Module 2 Introduction
- 2.2 Hyperledger Project Overview
- 2.3 Hyperledger Frameworks
- 2.4 Hyperledger Fabric
- 2.5 Hyperledger Fabric Use Cases


### Module 3 : Hyperledger Fabric Blockchain

- 3.1 Module 3 Introduction
- 3.2 Hyperledger Fabric Design Overview
- 3.3 Hyperledger Fabric Whiteboard
- 3.4 Hyperledger Fabric Consensus
- 3.5 Hyperledger Fabric Transactions
- 3.6 Transactions Whiteboard
- 3.7 Hyperledger Fabric Ledger

- 3.8 Ledger Whiteboard
- 3.9 Hyperledger Fabric Versions
- 3.10 Hyperledger Fabric Membership Services
- 3.11 Node Types and Roles
- 3.12 Nodes and Peers Whiteboard
- 3.13 Channels
- 3.14 Channels Whiteboard



# CERTIFIED BLOCKCHAIN DEVELOPER - HYPERLEDGER (CBDH)



## COURSE SYLLABUS:

### Module 4 : Access Controls and Secure Chaincode

- 4.1 Module 4 Introduction
- 4.2 Access Controls Lists (.acl)
- 4.3 Certificates and Certificate Authority
- 4.4 Organizations and Participants
- 4.5 Endorsement Policies
- 4.6 Rest APIs

### Module 6 : Hyperledger Fabric Explorer

- 6.1 Module 6 Introduction
- 6.2 Hyperledger Fabric Explorer Basics
- 6.3 Installation Requirements of Hyperledger Explorer

### Module 8 : Course Wrap Up

- 8.1 Module 8 Introduction
- 8.2 Course Review
- 8.3 Top 10 Things to know for the exam
- 8.4 Taking the Exam
- 8.5 Course Closeout

### Module 5 : Plan and Prepare Apps for Deployment

- 5.1 Module 5 Introduction
- 5.2 Development Whiteboard
- 5.3 Installation Considerations
- 5.4 Composer
- 5.5 Composer Demo

### Module 7 : Chaincode and Development

- 7.1 Module 7 Introduction
- 7.2 What is Chaincode
- 7.3 Writing Chaincode Considerations
- 7.4 Development Language
- 7.5 Client App Considerations
- 7.6 BNA Files
- 7.7 Service Discovery

# CERTIFIED BLOCKCHAIN SOLUTIONS ARCHITECT (CBSA)



54 Videos



5.17 Hours



20 Test Questions

## COURSE DESCRIPTION:

### Certified Blockchain Solutions Architect (CBSA)

The Certified Blockchain Solutions Architect (CBSA) certification is designed for professionals who specialize in architecting blockchain solutions. This certification validates the ability to design scalable and reliable blockchain solutions across various industries, ensuring security, efficiency, and compliance with best practices.

### KEY FEATURES:

**Comprehensive Blockchain Knowledge:** CBSA covers a broad spectrum of blockchain technologies, including public and private blockchains, consensus algorithms, smart contracts, and decentralized applications (dApps).

**Architectural Design Skills:** The certification focuses on the architectural aspects of blockchain solutions, emphasizing scalability, security, and integration with existing enterprise systems.

**Hands-On Expertise:** CBSA assesses practical skills in designing blockchain architectures, selecting appropriate platforms, configuring networks, and implementing solutions that meet specific business requirements.

**Industry Alignment:** CBSA prepares professionals to address real-world challenges in various industries such as finance, healthcare, supply chain, and government, aligning with industry standards and regulations.

**Global Recognition:** Issued by Blockchain Training Alliance (BTA), CBSA is recognized globally, enhancing career prospects and credibility in blockchain architecture roles.



# CERTIFIED BLOCKCHAIN SOLUTIONS ARCHITECT (CBSA)



## COURSE SYLLABUS:

### Module 1 : Certified Blockchain Solutions Architect Overview

- 1 Module 1 Introduction
- 2 What is a CBSA
- 3 Exam Questions
- 4 Exam Objectives

### Module 2 : Blockchain 101 Terminology and Components


- 1 Module 2 Introduction
- 2 What is a Blockchain
- 3 Blockchain Terminology
- 4 Blockchain Key Components

### Module 3 : Exam Objectives

- 1 Module 3 Introduction
- 2 Proof of Work, Proof of Stake, Other Proof Systems
- 3 Why Cryptocurrency is Needed
- 4 Public, Private, & Permissioned Blockchains
- 5 How Blocks are Written to a Blockchain
- 6 Block Activity Demo
- 7 Transactions Whiteboard
- 8 Cryptography
- 9 LTC Wallet Demo
- 10 Database or Blockchain
- 11 Public Blockchain Common Uses
- 12 Private & Permissioned Blockchain Common Uses
- 13 Launching Your Own Blockchain
- 14 Segwits and Forks

- 15 Mining
- 16 Byzantine Fault Tolerance
- 17 Consensus Among Blockchains
- 18 Hasing
- 19 Anders Hashing Demo
- 20 Security in Blockchain
- 21 Smart Contracts and dApps
- 22 History of Blockchain
- 23 Blockchain Programming Languages
- 24 Common Testing & Deployment Practices
- 25 Metamask Demo
- 26 Value Creation
- 27 Blockchain Architecture
- 28 Corda Blockchain Architecture Whiteboard
- 29 Enterprise Blockchains
- 30 Bitcoin Improvement Protocols

# CERTIFIED BLOCKCHAIN SOLUTIONS ARCHITECT (CBSA)



## COURSE SYLLABUS:

### Module 4 : Hyperledger

- > 1 Module 4 Introduction
- > 2 Hyperledger Project
- > 3 Hyperledger Fabric
- > 4 Hyperledger Chaincode
- > 5 Hyperledger Fabric Whiteboard
- > 6 Hyperledger Fabric on AWS Demo

### Module 5 : Ethereum

- > 1 Module 5 Introduction
- > 2 Ethereum Overview
- > 3 Ethereum EVM
- > 4 Ethereum Browsers
- > 5 Ethereum Development
- > 6 Etherscan Demo

### Module 6 : Course Closeout

- > 1 Module 6 Introduction
- > 2 Summary Review
- > 3 Taking the CBSA Exam
- > 4 Practice Question