

Blockchain Technical Training

COURSE CONTENT

GET IN TOUCH



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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

Blockchain Technical Training provided by Multisoft Systems is a comprehensive program aimed at equipping individuals with the knowledge and skills needed to understand and implement blockchain technology. The course covers fundamental concepts such as the architecture of blockchain, various types of blockchain networks, and their applications in different industries. It also delves into the intricacies of designing, deploying, and managing blockchain systems.

Module 1: Blockchain 101

- ✓ Overview of Centralized, Decentralized and Distributed Systems
- ✓ What is Blockchain?
- ✓ How are transactions initiated in a network?
- ✓ Comparison of Blockchain and Traditional Databases
- ✓ Blockchain working
- ✓ Public/Private Key Cryptography
- ✓ The beauty of Hash Functions and Merkle trees
- ✓ Cryptocurrency Mining
- ✓ Proof of Work/ Consensus
- ✓ Cryptocurrency wallet

Module 2: Introduction to Ethereum

- ✓ Ethereum vs Bitcoin
- ✓ Ethereum use cases
- ✓ Introduction to Ethereum
- ✓ Ethereum - A P2P world computer
- ✓ The Ethereum Blockchain
- ✓ Ethereum Virtual Machine
- ✓ Smart Contracts
- ✓ Gas - Price and Limit
- ✓ Ether and Ether Mining
- ✓ Ethereum tools - Swarm, Whisper and Mist
- ✓ Ethereum Framework - Web3.JS, Eth.JS
- ✓ Ethereum in today's world (DApps and DAOs)
- ✓ Development Environment - Solidity IDE, Truffle, Embark

- ✓ Ethereum Networks - Koven, Ropsten, Rinkeby
- ✓ Webpack and Browserify
- ✓ Blockchain Ethereum Developer Online Training

Module 3: Solidity

- ✓ Introduction to Solidity
- ✓ Basics (version pragma and comments)
- ✓ Structure of a contract
- ✓ Keywords
- ✓ Data Structures (Arrays, Mapping, Structs)
- ✓ Data Types (signed and unsigned int, strings, boolean, address)
- ✓ Looping and Conditional Statements
- ✓ Inheritance
- ✓ Polymorphism

Module 4: Advanced Solidity

- ✓ Imports and libraries
- ✓ Extended String Functionality and Bytes
- ✓ Custom Modifiers and Error Handling
- ✓ Creating and deploying your own tokens
- ✓ Event logging, handling
- ✓ Parameter Mapping and Returning multiple variables
- ✓ State Modifiers (Pure/View/Constant/Payable)
- ✓ Transferring Ether between contracts (ERC20 and ERC223)
- ✓ Deployment
- ✓ Contract ABI
- ✓ Introduction to the Truffle Framework

- ✓ Communicating between smart contracts and HTML pages using Web3.JS and
- ✓ Metamask
- ✓ Setting up event-driven Interfaces
- ✓ Client-side signing and remote nodes for DApps

Module 5: Developing a DApp using Truffle

- ✓ Creating a project structure on Truffle
- ✓ Writing the smart contract
- ✓ Compiling and migrating the smart contract
- ✓ Publishing the DApp
- ✓ How Web3.JS and Truffle work with ReactJS
- ✓ Deploying smart contract services on the test Blockchain network
- ✓ Running the DApp on the Ethereum node using Metamask