

BLOCK CHAIN MODULE 01

Fundamental Blockchain

Arcitura®
CERTIFIED
Blockchain Architect

OVERVIEW

This course provides a clear, end-to-end understanding of how blockchain works. It breaks down blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of blockchain are explained, followed by plain English descriptions of each primary part of a blockchain system and step-by-step descriptions of how these parts work together.

The following primary topics are covered:

- Benefits and Challenges of Blockchain
- Blockchain Business Drivers and Technology Drivers
- Understanding Blockchain's Decentralized Model
- Blockchain Value Propositions
- How Blockchain Can be Used for Different Industries
- Blockchain Applications, Networks and the Distributed Ledger
- How the Distributed Ledger Can Relate to Relational Database
- Fundamental Components of a Blockchain Architecture
- Transactions, Records and Pools
- Blocks, Chains and Block Headers
- Blockchain Users, Full Nodes and Partial Nodes
- Step-by-Step Understanding of the Record and Block Lifecycle
- Step-by-Step Understanding of How the Merkle Tree Works
- Step-by-Step Understanding of How Consensus Works
- Consensus Algorithms (PoW, PoS, PoA, DPoS, LPoS, PoI, PoET, PoC, PoB, Round Robin)
- Public vs. Private / Permissionless vs. Permissioned Blockchains
- Coins, Tokens, Smart Contracts
- Basics of Crypto Hashing and Cryptography
- On-Chain, Off-Chain and Cross-Chain Activity
- Understanding Soft Forks and Hard Forks
- Common Blockchain Metrics

Duration: 1 Day

TRAINING + CERTIFICATION

This course is part of a training and accreditation program through which official certification can be achieved and for which official training and certification badges can be issued.



www.arcitura.com/blockchain

eLEARNING + PRINTED STUDY KITS

This Arcitura study kit includes the contents listed below. These course materials are available in full-color printed format, as well as in eLearning subscription format, via online access and offline file download.

- Workbook (1 of 3)
- Exam Preparation Guide (1 of 3)
- Mind Map Poster
- Symbol Legend Poster
- Flashcards
- Audio Tutor Recording



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EXAM PROCTORING

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BLOCK CHAIN MODULE 01

Fundamental Blockchain

Certified
DevOps
Specialist

Certified
Blockchain
Architect

Certified
IoT
Architect

Certified
Containerization
Architect

Certified
Machine
Learning
Specialist

Certified
Artificial
Intelligence
Specialist

MODULE 01 Fundamental DevOps



MODULE 02 DevOps in Practice



MODULE 03 DevOps Lab



MODULE 01 Fundamental Blockchain



MODULE 02 Blockchain Technology & Architecture



MODULE 03 Blockchain Technology & Architecture Lab



MODULE 01 Fundamental IoT



MODULE 02 IoT Technology & Architecture



MODULE 03 IoT Technology & Architecture Lab



MODULE 01 Fundamental Containerization



MODULE 02 Containerization Technology & Architecture



MODULE 03 Containerization Technology & Architecture Lab



MODULE 01 Fundamental Machine Learning



MODULE 02 Advanced Machine Learning



MODULE 03 Machine Learning Lab



MODULE 01 Fundamental Artificial Intelligence



MODULE 02 Advanced Artificial Intelligence



MODULE 03 Artificial Intelligence Lab

