Certified Blockchain Solution Architect (CBSA)

Course Contents

The Modules covered in CBSA course are as follows:

Module 1- Introduction

➢ Introduction to Certified Blockchain Architect

Module 2- Blockchain Architecture Basics

➢ What is Blockchain?
➢ How Blockchain works?
➢ How Blockchain is different from traditional technologies?
➢ Is Blockchain a Silver Bullet?
➢ Blockchain Decision Overview
  • Digital Assets and Multiple Parties
  • Technical Approach
  • Network Configuration
  • Deciding Factors

Module 3- Tools required for Blockchain Architecture

➢ Additional Technologies Supporting Blockchain
➢ Programming Languages you can use to Build Blockchain solutions.
➢ Cryptography and Blockchain Algorithms
➢ Overview of Blockchain Platforms
  • Public Platforms
  • Commercial Platforms
➢ Blockchain Functional Architecture
➢ Blockchain Environment Considerations
  • Public vs Private
  • Permissioned vs Permissionless
  • Cloud vs Native

Module 4- Developing your own Network Nodes

➢ Blockchain Functional Risks
  • Transaction costs
  • Interoperability
➢ Additional Blockchain technologies
  • On Chain vs Off Chain
  • Lighting Network
  • CoCo Framework
  • Smart Contracts

- Oracles
- ➢ Business Components of Blockchain Architecture
  - Problem
  - Stakeholders
  - Devices
  - Type of Blockchain
- ➢ Technical Components of Blockchain Architecture
  - Ledger
  - Smart Contracts
  - P2p Network
  - Membership
  - Protocols

Module 5- Architecting your own Blockchain Solution

- o Analyze requirements
- o Translate requirements into functions
  - Transactions
  - Blocks
  - Data Privileges
  - Data Processing
- o Architecture of Blockchain Platforms
  - Multichain
  - Ethereum
  - Hyperledger
    - o Hyperledger Fabric Architecture
    - o Hyperledger Composer Architecture
- Corda
  - o Corda Architecture