

# Introduction to the Certified Blockchain Expert (CBE)

# Certified Blockchain Expert



A Certified Blockchain Expert is a skilled professional who has thorough knowledge of what is Blockchain Technology, how it works in different industries.

# The Purpose



Establish and govern minimum standards for credentialing Blockchain experts who specialise in enterprise development measures.

Inform the public that credentialled individuals meet or exceed the minimum standards.

Reinforce Blockchain expertise as a unique and self-regulating profession.

## For Whom



- Investment Bankers, Consultants & Advisors
- University Professors
- Engineering & Management Students
- Programmers & Developers
- Software Engineers & Architects
- Cryptocurrency Enthusiasts
- CEO, CTO, CIO, CISO or any other CXO
- Operations Head in Businesses
- Senior Government Officials
- Security Professionals, Administrators
- Venture Capitalists, Angel & Seed Investors

# Benefits of taking this course



Prove your Blockchain skills & understanding.

Grasp a deeper understanding of Blockchain & how it works.

Build your own Blockchain solution for different business use-cases, with acquired knowledge.

# Requirements to take this Certification



Basic knowledge of Computer Science.

Awareness of different blockchains like Bitcoin, Ethereum etc.

Motivation to acquire a profound understanding of Blockchain.

# Recommended Experience



There is no such recommended experience required for getting this certification.

## **Duration for the Course**



10 hours for the entire training.

1 hour for assessment exam.

Training will be online.

Training can be consumed as per candidate's availability & online speed.

## Exam



There will be an online exam with multiple choice questions adding upto 100 marks followed by a training.

You need to acquire 60+ marks to clear the exam.

In case you fail the exam, you can retake the exam after 1 day.

You can take the exam for a maximum of 3 times.

If you fail to acquire 60+ marks even after 3 attempts, you will need to contact the Blockchain Council team to have manual assistance for clearing the exam.









#### **Module 1: Introduction to CBE**

## **Module 2: Origin of Blockchain Technology**

- Electronic Systems and Trust
- Distributed Versus Centralized Versus Decentralized
- Bitcoin Predecessors
- The Bitcoin Experiment
- Bringing Bitcoin to Life

#### Module 3: Introduction to Blockchain

- What is Blockchain?
- Why is Blockchain a Distributed, P2P Network?
- Blockchain Vs Cryptocurrency
- Types of Blockchain
- What Are Different Blockchain Technologies?
- Benefits of using Blockchain Technology



## **Module 4: Tokenize Everything**

- Understanding Tokens
- Ethereum Token Standards

## **Module 5: Blockchain Ecosystem**

- Merkle Tree and Hashing
- Blocks, Wallets and Addresses
- Public and Private Key
- Cryptography and Cryptographic Algorithms

#### **Module 6: Blockchain Mining**

- What is Blockchain Mining?
- Types of Mining
- Who are Miners?





#### Module 7: Transaction: UTXO Model Vs Account-Based Model

- Introduction to UTXO Model
- State Transitions in the UTXO Model
- Introduction to Account based Model
- State Transitions in the Account Model

## **Module 8: Security and Privacy**

- What are Smart Contracts?
- What is Consensus?
- Types of Consensus Algorithms

Module 9: Other Consensus Algorithms in Blockchain

Module 10: Blockchain Solutions - Steps and measures



#### Module 11: Use-Cases of Blockchain

#### Module 12: Other Use-Cases of Blockchain

- Blockchain in IoT
- Blockchain in CBDC
- Blockchain in Retail and Fashion Industry
- Blockchain in Sports and eSports
- Blockchain in Legal Industry
- Social Impact of Blockchain
- DeFi Use-Case in Blockchain: Stablecoins
- DeFi Use-case in Blockchain: Lending and Borrowing
- DeFi Use-Case in Blockchain: Synthetic Assets
- DeFi Use-Case in Blockchain: Prediction Markets
- DeFi Use-Case in Blockchain:DeFi Insurance



## **Module 13: Additional Resource**

• Directed Acyclic Graphs