

Blockchain Security Fundamentals

Modality: On Demand

Duration: 4 Hours

About this Course:

Blockchain is often described as the future of technology and holds pivotal importance in the world of next-gen app development. This technology continues to revolutionize the tech-based world of today and tomorrow and opens doors to endless new opportunities for small and large businesses. Considering the revolutionary impact of Blockchain technology, it is essential for the business to understand the security fundamentals of this technology to relish the maximum benefits. Professionals having proficient knowledge of Blockchain security have a great demand in today's tech-based business world.

The Blockchain Security Fundamentals course aims to train students with the advanced skillset needed to identify security threats and vulnerabilities in a distributed Blockchain network. It strives to help students gain a better understanding of key concepts of Blockchain security and gives a comprehensive overview of innovative security techniques and practices. Furthermore, this course covers the topics relating to risk mitigation and cybersecurity attack vectors in the Blockchain network. This course will provide professionals with practical knowledge of conducting security and risk analysis of a Blockchain network.

Course Objectives:

The primary objective of this course is to help professionals develop a better understanding of Blockchain security fundamentals. This course focuses on the following key elements:

- Best Blockchain Security Practices
- Development and Implementation of Blockchain Security
- Blockchain Security Threats and Vulnerabilities
- Addressing the Security Concerns in Blockchain
- Evaluating and Assessing Blockchain Security
- Identifying Hyperledger Deployment Security Threats
- Identifying R3 Corda Deployment Security Threats
- Identifying Ethereum Deployment Security Threats

Audiences:

This course is tailored for the following group of professionals:

- Professionals seeking knowledge of Blockchain Security
- Professionals striving furtherance in IT careers
- Candidates willing to learn the Blockchain security practices

Prerequisites:

Professionals planning to take the Blockchain Security Fundamentals course need to comply with the following prerequisites:

- Surface Knowledge of Blockchain Essentials is highly recommended but not obligatory.

Course Outline:

Introduction

- Course Overview
- Preview
- Download Course Slides

Blockchain Basics

- Security Basics
- Smart Contracts
- Consensus and Mining
- Development Best Practices

Blockchain Security Advanced Concepts

- Cryptography
- Hashing Demo
- Permissioning
- Channels
- IAM
- Trust or Trustless

Risk Management

- Risk Assessments
- Preview
- Risk Mitigation

Blockchain Compliance

- Compliance Requirements
- Compliance Benefits

Vulnerabilities

- Know Vulnerabilities
- Vulnerability Remediation

Blockchain Platforms and Considerations

- Hyperledger Fabric
- R3 Corda
- Ethereum

Bonus Lectures and Demos

- Demo - IBM BaaS
- Demo Metamask
- Demo Corda Demobench

Course Closeout

- Blockchain Certification
- Course Closeout