

Introduction to Blockchain and Smart Contract Technology

Course Introduction

The demand for Blockchain developers is strong today, and the technology is positioned for rapid growth as it gains greater acceptance worldwide.

This course has been designed in collaboration with active Blockchain developers who have projects running throughout the world – developers who know precisely what skills need to be learned to become proficient in this exciting new technology.

In this course, students will gain extensive knowledge of what Blockchain is and how it works, with a focus on Ethereum and Smart Contracts. Students will become proficient with the Solidity programming language, and they will learn how to develop a range of Smart Contracts. In addition, they will gain industry knowledge of where Blockchain is being applied today and what makes a strong Blockchain use case.

Course Prerequisites

To be successful in this course, students should have some software development experience. The level of experience could include any level of basic programming or software exposure, such as the basics of the command line, JavaScript, HTML, CSS, JQuery, ReactJS, NodeJS, or Python.

Course Objective

The purpose of the course is to provide students with a strong foundation in Blockchain and Smart Contract technology and the skills necessary to develop Smart Contracts.

Of Interest to

Anyone with a genuine interest in software development and a curiosity to learn more about Blockchain technology and Smart Contracts.

Course Breakdown

Module 1 - Blockchain Fundamentals

Students will develop an in-depth understanding of what Blockchain is, and they will learn to describe technically how Blockchains work, including the many components involved, such as Public Key Infrastructure, Digital Signatures, and Consensus Algorithms.

Module 2 - Ethereum Explained

Students will take a deep dive into Ethereum and explore what Ethereum is, how it works, and how it differs from other cryptocurrencies and Blockchain platforms. Students will develop a variety of Smart Contracts.

Module 3 - Use Cases and Active Projects

Students will explore how Blockchain technology is impacting the world today, where it is being applied, and its future potential. Students will get to know current applications and use cases of Blockchain, as well as the criteria for selection of use cases for Blockchain technology.

Course Notes

Students will be assessed through a combination of practical coding assignments, end-of-module quizzes, and a final exam.

Method of Delivery

Integrated Learning™ System training facilitated by subject matter specialists.

