

Blockchain Application Development

Course Introduction

The demand for Blockchain developers is strong, 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 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 gain experience with leading web and Blockchain application technologies, including ReactJS, Web3JS, JavaScript, Truffle, Ganache-cli, and more.

Students will become proficient with the Solidity programming language and learn how to develop Smart Contracts and Blockchain-powered web applications.

Course Prerequisites

To be successful in this course, students should be active web developers with a genuine interest in Blockchain technology and Blockchain-powered applications. Ideally, students should have at least one year of experience developing web applications and have attained skills and experience with JavaScript, Python, ReactJS, and Angular.

Course Objective

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

Of Interest To

Anyone with experience in web application development who wishes to learn how to create decentralized, Blockchain-powered applications.

Course Breakdown

Module 1 - Blockchain Fundamentals and Ethereum

Students will develop an in-depth understanding of what Blockchain is, and they will learn to describe technically how Blockchains work. Students will also explore how Ethereum differs from other crypto-currencies and Blockchain platforms. Students will develop a variety of Smart Contracts.

Module 2 - Blockchain Applications

Students will begin with the fundamentals of web applications and move to modern, decentralized Blockchain applications, ultimately developing one of their own. Students will also gain hands-on development experience with Truffle, Ganache, Solidity, and ReactJS.

Module 3 - Decentralized Exchange Project

Students will extend their newly created Blockchain application to become a full-featured decentralized exchange. Students will also create a Smart Contract from scratch, deploy it, and wire it up to their ReactJS web application. Students will extend the web application to enable routing between multiple views and enable transactions.

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.

