Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Bitcoin+ Developer™

CODE:	LENGTH:	PRICE:
AIC_BC-200	30 Hours	£370.00

Description

Navigate the depth of development with Bitcoin

- **Foundational Learning**: Covers Bitcoin scripting, blockchain tech, and security practices
- **Advanced Builds**: Learn Layer 2 scaling, SDK/API integration, and real-world use cases
- **Hands-On Projects**: Complete practical work with a capstone project
- **Future-Ready**: Understand trends and secure coding in decentralized apps

At a Glance: Course + Exam Overview

- **Included:** Self-paced course + Official exam + Digital badge
- **Delivery:** Projects & case studies
- **Outcome:** Industry-recognized credential + hands-on experience

The following tools will be explored in this course:

- Bitcoin Core
- Electrum
- BitcoinJS
- Umbrel

What's Included (One-Year Subscription + All Updates):

- High-Quality Videos, E-book (PDF & Audio), and Podcasts
- AI Mentor for Personalized Guidance
- Quizzes, Assessments, and Course Resources
- Online Proctored Exam with One Free Retake
- Comprehensive Exam Study Guide
- Access for Tablet & Phone

Objectives

- Understanding Bitcoin and Blockchain Fundamentals
- Bitcoin Scripting Proficiency
- Layer 2 Scaling Solutions
- SDK/APIs and Deployment

Audience

- **Blockchain Developers**: Master the integration of Bitcoin protocols into decentralized applications and platforms.
- **Cryptocurrency Enthusiasts:** Learn how to develop, trade, and manage Bitcoin-based assets and understand blockchain

technology.

- **Software Engineers:** Gain expertise in incorporating Bitcoin's blockchain into software applications for secure and efficient transactions.
- **Financial Analysts**: Explore the potential of Bitcoin in financial markets and use blockchain technology for secure financial solutions.
- **Tech Innovators:** Dive into Bitcoin development to stay at the forefront of cryptocurrency and blockchain innovation.

Prerequisites

- Familiarity with general programming concepts like data structures, algorithms and networks.
- Understanding of at least one legacy programming stack (e.g. Python, JavaScript, Java or similar).
- Fundamental knowledge to use command line consoles on any operating system.
- Ability to understand developer concepts like SDKs, APIs, application development tools etc.
- Experience with building end to end tiered applications.

Programme

Course Introduction

Module 1: Introduction to Bitcoin and Blockchain

1.1 Overview of Bitcoin Technology
1.2 Overview of Blockchain Technology

Module 2: Bitcoin Scripting Language

2.1 Fundamentals of Bitcoin Scripting Language
2.2 Components of Scripting Language Basics
2.3 Uses of Bitcoin Scripts
2.4 Execution Condition of Scripts
2.5 Security and Vulnerabilities in the Scripts

Module 3: Building on Bitcoin Script

3.1 Standard Transactions
3.2 Trade and DeFi
3.3 Smart Contracts
3.4 Asset Definition

Module 4: Layer 2 Scaling Solutions

4.1 Basics of Layer 2
4.2 Different Layer 2 Projects

Module 5: Use Cases and Projects using Layer 2

5.1 Payments Use Cases
5.2 Assets and DeFi
5.3 Industry Use Cases
5.4 Integration with Other Tech – IoT

Module 6: Security and Best Practices

6.1 For Scripting Apps
6.2 General Security Practices
6.3 Keys and Smart Contracts
6.4 Off the Chain
6.5 Layer 2

Module 7: Integration (SDK/APIs) and Deployment

7.1 Basic Overview of SDK & APIs
7.2 BitcoinJS
7.3 BitcoinJ

7.4 Bitcoinlib
7.5 Bitcoin RPC Client (Python)
7.6 Deployment Strategies

Module 8: Future Trends and Innovations

8.1 Innovation in Bitcoin Applications
8.2 Innovation in Bitcoin Layer 2
8.3 Innovation in Asset Definition
8.4 Innovation in Bitcoin Interoperability
8.5 Innovation in Bitcoin Identity and Users
8.6 Innovation in Bitcoin Dev Tools

Module 9: Capstone Project

1. Capstone Project

Follow on courses

Recommended Certifications:

- Bitcoin+ Executive™ (BC-100) - Empowering Executives with Bitcoin Innovation
- Blockchain+ Executive™ (BL-100) - Lead confidently in the Blockchain executive sphere
- Bitcoin+ Everyone™ (BC-900) -Demystify Bitcoin: Simple, Accessible, Essential for All

Test and Certification

Exam Details

- Duration: 90 minutes
- Passing Score: 70%
- Format: 50 multiple-choice/multiple-response questions
- Delivery Method: Online via proctored exam platform (flexible scheduling)

Exam Blueprint

- Introduction to Bitcoin and Blockchain - 5%
- Bitcoin Scripting Language - 10%
- Building on Bitcoin Script - 20%
- Layer 2 Scaling Solutions - 10%
- Use Cases and Projects using Layer 2 - 15%
- Security and Best Practices - 5%
- Integration (SDK/APIs) and Deployment - 20%
- Future Trends and Innovations - 5%
- Project Work and Capstone - 10%

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
01 Jan 0001			English	Self Paced Training		£370.00

Additional Information

This training is also available as onsite training. Please contact us to find out more.