

SEVERN BUSINESS COLLEGE

SBC Level 6 Graduate Diploma in Blockchain and Cryptofinance

Course Handbook

Qualification
SBC Level 6 Graduate Diploma in Blockchain and Cryptofinance

Level
6

Guided Learning Hours
480

Total Qualification Time Hours
1200

Credit Value
120

Qualification Objective
The Level 6 Graduate Diploma in Blockchain and Cryptofinance is designed to equip learners with advanced knowledge and practical skills in blockchain technologies and the rapidly evolving field of cryptofinance. This course will provide a comprehensive understanding of the decentralized finance ecosystem, digital currencies, blockchain architecture, and how these technologies are disrupting traditional financial systems. Through a combination of theoretical learning and real-world applications, students will gain the necessary tools to contribute to the emerging digital economy.
The course comprises six units, each carrying 20 credits for a total of 120 credits. Each unit is designed to develop specific expertise in blockchain technologies, cryptofinance, and related fields. The learning outcomes for each unit are broken down into four key areas, each with specific assessment criteria to evaluate learners' understanding and application of the concepts.

Assessment
Assessment is through practical assignments, with no exams - to more accurately reflect the real working environment.

Unit Structure of the Qualification
Level 6 Graduate Diploma in Blockchain and Cryptofinance (120 credits):

Units	Unit level	Unit credit
Introduction to Blockchain Technology	6	20
Cryptocurrencies and Digital Assets	6	20
Decentralized Finance (DeFi)	6	20
Blockchain and Cryptofinance Strategy	6	20
Advanced Blockchain Development	6	20
Blockchain and Cryptofinance in Global Finance	6	20

Assessment Grades

Marks Ranges	Marking Criteria
Pass	All learning outcomes are achieved. All assessment criteria are met.
Fail	All learning outcomes are not achieved. All assessment criteria are not met.
No Marks	Plagiarism

UNIT SPECIFICATIONS

Unit Title
Introduction to Blockchain Technology

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria

The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Understand the fundamentals of blockchain technology.	1.1. Explain the concept of blockchain and its components. 1.2. Discuss the difference between centralized and decentralized systems. 1.3. Identify key benefits and limitations of blockchain technology. 1.4. Evaluate the potential applications of blockchain beyond cryptocurrencies.
2. Describe the principles of consensus mechanisms.	2.1. Define consensus mechanisms in blockchain. 2.2. Compare proof-of-work, proof-of-stake, and other consensus algorithms. 2.3. Assess the strengths and weaknesses of different consensus mechanisms. 2.4. Investigate the role of consensus in blockchain security.
3. Evaluate the role of smart contracts.	3.1. Define smart contracts and their functionalities. 3.2. Discuss the advantages of smart contracts over traditional contracts. 3.3. Identify common use cases of smart contracts. 3.4. Examine the challenges and risks associated with smart contract implementation.
4. Analyze blockchain's impact on industries and society.	4.1. Examine the potential impact of blockchain on industries such as finance, healthcare, and supply chain. 4.2. Discuss blockchain's role in enhancing transparency and accountability. 4.3. Analyze the social and ethical implications of blockchain technology. 4.4. Evaluate the future potential and challenges of blockchain adoption.

UNIT SPECIFICATIONS

Unit Title
Cryptocurrencies and Digital Assets

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria
The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Understand the principles behind cryptocurrencies.	1.1. Explain the concept and purpose of cryptocurrencies. 1.2. Discuss the underlying technologies of cryptocurrencies, including blockchain. 1.3. Compare different types of cryptocurrencies. 1.4. Analyze the role of cryptocurrency in the financial ecosystem.
2. Evaluate the mechanism of cryptocurrency transactions.	2.1. Describe the process of cryptocurrency transactions. 2.2. Examine transaction fees, mining, and validation. 2.3. Identify key players involved in cryptocurrency transactions. 2.4. Investigate the security measures used to protect cryptocurrency transactions.
3. Explore the regulatory environment for cryptocurrencies.	3.1. Outline global regulatory frameworks for cryptocurrencies. 3.2. Discuss the challenges of regulating cryptocurrencies. 3.3. Compare the legal status of cryptocurrencies in different regions. 3.4. Evaluate the potential for future regulation and its implications.
4. Assess the future of cryptocurrencies and digital assets.	4.1. Investigate the growth trends in cryptocurrency markets. 4.2. Analyze the role of institutional adoption of digital assets.

	4.3. Discuss the risks and volatility of cryptocurrency markets. 4.4. Predict future developments and innovations in digital assets.

UNIT SPECIFICATIONS

Unit Title
Decentralized Finance (DeFi)

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria
The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Understand the core concepts of decentralized finance (DeFi).	1.1. Define DeFi and its significance in the financial sector. 1.2. Explain how DeFi differs from traditional finance. 1.3. Identify the key components of a DeFi ecosystem. 1.4. Evaluate the role of blockchain and smart contracts in DeFi.
2. Analyze the financial instruments within DeFi.	2.1. Describe popular DeFi products like lending, borrowing, and staking. 2.2. Evaluate the benefits and risks of using DeFi platforms. 2.3. Compare decentralized exchanges (DEX) with centralized exchanges (CEX). 2.4. Investigate the role of liquidity pools and yield farming in DeFi.
3. Assess the security challenges in DeFi.	3.1. Discuss common security risks in DeFi applications. 3.2. Evaluate the impact of smart contract vulnerabilities on DeFi platforms. 3.3. Identify common attack vectors in DeFi. 3.4. Recommend strategies to mitigate security risks in DeFi.
4. Examine the regulatory and legal considerations in DeFi.	4.1. Review the regulatory landscape of DeFi platforms globally. 4.2. Discuss the challenges of enforcing regulations in a decentralized system. 4.3. Explore the role of compliance in DeFi. 4.4. Investigate the future of DeFi regulation.

UNIT SPECIFICATIONS

Unit Title
Blockchain and Cryptofinance Strategy

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria

The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Develop a strategic framework for blockchain integration in businesses.	1.1. Assess the strategic advantages of blockchain for businesses. 1.2. Identify industries that can benefit from blockchain implementation. 1.3. Analyze case studies of successful blockchain adoption. 1.4. Evaluate the barriers to blockchain adoption in traditional businesses.
2. Create a business model for a cryptocurrency or blockchain-based venture.	2.1. Identify the key components of a cryptocurrency-based business model. 2.2. Discuss different revenue models for blockchain ventures. 2.3. Analyze market trends and identify opportunities for blockchain-based startups. 2.4. Develop a comprehensive business plan for a blockchain-related enterprise.
3. Understand the role of blockchain in financial inclusion.	3.1. Evaluate how blockchain can enhance financial inclusion. 3.2. Discuss the use of blockchain in unbanked populations. 3.3. Assess the role of decentralized identities in financial inclusion. 3.4. Examine case studies of blockchain initiatives targeting financial inclusion.
4. Analyze the environmental impact of blockchain technologies.	4.1. Investigate the energy consumption of blockchain networks. 4.2. Evaluate the environmental impact of cryptocurrency mining. 4.3. Discuss the adoption of sustainable practices in blockchain. 4.4. Propose strategies for reducing blockchain's carbon footprint.

UNIT SPECIFICATIONS

Unit Title
Advanced Blockchain Development

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria
The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Understand the process of blockchain development.	1.1. Identify the tools and platforms for blockchain development. 1.2. Explain the process of creating and deploying a blockchain application. 1.3. Examine the challenges involved in blockchain development. 1.4. Discuss the importance of testing and debugging blockchain systems.
2. Develop a smart contract for a blockchain application.	2.1. Define the role of smart contracts in decentralized applications (DApps). 2.2. Develop a basic smart contract using Ethereum or other platforms. 2.3. Test and deploy a smart contract. 2.4. Optimize smart contracts for efficiency and cost-effectiveness.
3. Examine blockchain security and cryptography.	3.1. Describe common cryptographic techniques used in blockchain systems. 3.2. Assess the role of encryption in ensuring blockchain security. 3.3. Investigate attacks like 51% attacks and how to prevent them. 3.4. Recommend best practices for securing blockchain applications.
4. Explore the future of blockchain development technologies.	4.1. Investigate emerging technologies in blockchain development. 4.2. Examine the role of interoperability and cross-chain communication. 4.3. Predict the future trends in blockchain scalability. 4.4. Discuss the development of Layer 2 solutions and their impact.

UNIT SPECIFICATIONS

Unit Title
Blockchain and Cryptofinance in Global Finance

Level
6

Guided Learning Hours
80

Learning Time Hours
200

Credit Value
20

Learning Outcomes and Assessment Criteria
The learning outcomes describe the abilities that learners will possess after they have completed the unit. The assessment criteria provide a list of achievements sufficient to demonstrate that a learner has met the learning outcomes.

Learning Outcome *To achieve this unit a learner must:*	**Assessment Criteria** *Assessment of this outcome will require a learner to demonstrate that they can:*
1. Analyze the global impact of blockchain on traditional finance.	1.1. Compare blockchain's role in traditional finance systems with emerging blockchain solutions. 1.2. Assess the potential for blockchain to disrupt financial services like banking and payments. 1.3. Examine how blockchain is reshaping global remittances. 1.4. Analyze how central banks are responding to cryptocurrencies.
2. Evaluate the relationship between blockchain and financial regulations.	2.1. Discuss the role of blockchain in reshaping financial regulations. 2.2. Examine how blockchain can enhance regulatory compliance. 2.3. Investigate the challenges posed by decentralized finance to traditional financial regulation. 2.4. Evaluate the potential for blockchain to enable new regulatory frameworks.
3. Explore the integration of blockchain with global financial markets.	3.1. Identify the impact of blockchain technology on financial markets. 3.2. Examine the role of tokenization in financial markets. 3.3. Evaluate the use of blockchain for trading, clearing, and settlement. 3.4. Discuss the implications of blockchain for cross-border transactions.
4. Evaluate the role of blockchain in sustainable finance.	4.1. Discuss the application of blockchain in ESG (Environmental, Social, and Governance) investments. 4.2. Examine how blockchain can improve transparency in sustainable finance. 4.3. Analyze blockchain's potential to streamline green bonds and carbon markets. 4.4. Evaluate the challenges of integrating blockchain into sustainable finance practices.

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