Blockchain Certificate Program

CONTINUING STUDIES

The 120 hour digital Blockchain Certificate Program provides learners with knowledge, strategies, tools and skills related to the use of Blockchain in the workplace. Blockchain skills are required in a variety of fields including government, health, education, financial services, logistics, real estate, start-ups, oil and gas, the non-profit sector and business.

Using a digital pedagogy approach that integrates theory and practical application, learners use Blockchain tools, techniques and platforms to gain an understanding of this technology. Learners are provided with the essentials of Blockchain technology including its origin, what it is, how it is being used, how to use it and how it can be used to add value within businesses and society.

Graduates of the Blockchain Certificate Program are qualified to write the Blockchain Professional (BCP®) exam as part of the Foundation Technologies Institute credentialing process.

Admission Requirements

- BC secondary school graduation, or equivalent, or 19 years of age and out of secondary school for at least one year as of the first day of classes.
- A minimum grade of 60% in one of: English 12, English 12 First Peoples, or TPC 12 (Technical and Professional Communications), or an equivalent Provincial Level Adult Basic Education English course; or a minimum score of 24/40 (level 4) on the LPI (Language Proficiency Index). Note: Communications 12 is not acceptable.
- A minimum grade of 60% in one of: Foundations of Mathematics and Pre-Calculus Grade 10, or in both Adult Basic Education MATH 071 and MATH 072.

Graduation Requirements

Learners must attain a minimum grade of 70% in all courses in the program.

BC 101 Introduction to Blockchain
18 Hours

This course provides learners with the foundational knowledge of today's blockchain technology platforms and how this technology provides value to the world of business and society.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Describe the origin of blockchain technology.
- Define blockchain including its purpose.
- Explain a minimum of five key terms that relate to blockchain technology.
- Identify a minimum of five features as related to blockchain technology.
- Describe what a distributed database is.
- Explain the difference between Bitcoin and blockchain.
- Describe blockchain's value proposition as a technology and as a disruptor.
- Describe the current impact of blockchain technology on all aspects of business and society.

Learner Assessment

Assignments	50%
Quizzes	50%
TOTAL	**100%**

Note: for all courses assignments can be:

- Research & Report
- Discussion Forums
- Collaboration Reflection
- Combination

BC 102 Introduction to Blockchain Networks
28 hours

This course provides learners with information on various types of Blockchain Networks including public, private, consortium and permissioned networks. What Blockchain networks are used for, the value they bring to business and society and how networks differ from each other.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Distinguish the types of blockchain networks including what environment they are best suited for.
- Explain the strengths and weaknesses of public, private, consortium and permissioned networks in the blockchain ecosystem.
- Describe the difference between public, private, consortium and permissioned blockchain networks.
- Provide examples of the type of network that would suit different types of businesses and the reasons for using that specific network.

Learner Assessment

Assignments	50%
Quizzes	50%
TOTAL	**100%**

BC 103 Introduction to Blockchain platforms
28 hours

This course provides learners with an introduction to popular blockchain platforms including Hyperledger, Bitcoin and Ethereum.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Describe five Hyperledger frameworks.
- Discuss how Hyperledger leverages open standards and open governance to support business solutions.
- Explain the differences between Hyperledger and permissionless blockchain technologies
- Explain tokens represent real assets and how they are utilized.
- Describe the value of Bitcoin as it relates to a digital economy
- Explain the characteristics of smart contracts and how smart contracts can bring value to business and society.

Learner Assessment

Quizzes	50%
Assignments	50%
TOTAL	**100%**

BC 104 Cryptocurrencies and the Digital Economy
18 hours

This course is designed to provide you with a foundational background and understanding Cryptocurrencies, and the Digital Economy.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Explain the purpose of cryptocurrencies.
- Describe how cryptocurrencies work.
- Explain how people interact with cryptocurrencies.
- Evaluate how cryptocurrency exchanges support the digital economy.

Learner Assessment

Quizzes	50%
Assignments	50%
TOTAL	**100%**

BC 105 The Future of Blockchain: Challenges and Opportunities
14 hours (over two weeks)

The course is designed to provide you with a foundational background and understanding of the future of the emerging technology called blockchain.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Explain the challenges that blockchain must overcome to gain mainstream acceptance.

- Describe some of the possibilities that blockchain may influence for both commercial and social good.

Learner Assessment

Assignments	50%
Exam	50%
TOTAL	**100%**

BC 106 Introduction to Real World Blockchain Use Cases
14 hours (over two weeks)

The course provides learners with a foundational background and understanding of how the emerging technology called blockchain is being applied by showcasing real world blockchain use cases.

Learning Outcomes

At the conclusion of this course, learners will be able to:

- Define the key elements of a use case
- Explain a minimum of five key terms that relate to blockchain technology
- Identify five use cases for blockchain technology
- Identify two use cases for cryptocurrency

Learner Assessment

Assignments	50%
Exam	50%
TOTAL	**100%**