Blockchain

ICTC's WIL Digital Blockchain e-learning course provides a foundational understanding of the Blockchain ecosystem. It focuses on blockchain technologies, their core concepts, and their industrial applications (including cryptocurrencies). It also includes interactive activities such as videos and interviews with Blockchain actors from the Canadian ecosystem. At the end of the course, students will be able to design a simple application of blockchain concepts to a real-world scenario, while understanding the societal and economic impacts of these technologies.

Modules		Lessons	Learning Objectives	
Module 1	**Introduction to Blockchain**	• History of Bitcoin and Blockchain • How Bitcoin and Ethereum work • Types of blockchain and cryptocurrencies, top blockchain networks	• Learn about the history of Bitcoin and Blockchain • Explore how Bitcoin and Ethereum work • Compare and contrast the different types of blockchain technologies	Padlet Discussion
Module 2	**Blockchain in Financial Services**	• Origin of money and coinage • US and the gold standard, Bretton Woods • Current status of regulations	• Explore the origins and recent history of money • Learn about the current blockchain regulations in finance	Padlet Discussion
Module 3	**Cryptocurrencies, Decentralized Finance (DeFi), and NFTs**	• Colored coins, Ethereum, smart contracts, Alt coins, main cryptocurrencies • Applications of blockchain • NFTs (non-fungible tokens)	• Discover the main cryptocurrencies • Analyse smart contracts	Quiz
Module 4	**Industry Applications**	• Supply chain • Healthcare • Real Estate • Environmental Stewardship	• Describe industry applications of blockchain technology • Design a simple application of blockchain concepts to a real-world scenario • Develop a pitch for a token-based solution addressing a business problem	Padlet Discussion
Module 5	**Self-Sovereign Identity**	• The management of digital identity and its main actors • Canadian standards and associations, Canadian projects • Security and risk management	• Explore the management of digital identity, its main actors and Canadian standards • Analyse the security and risk management aspects of blockchain technology	Padlet Discussion
Module 6	**The Future of Blockchain**	• Canadian actors in Blockchain, hot jobs and professional opportunities • Canada and the world, hot spots for blockchain • Emerging blockchain technologies and applications	• Learn about the Canadian main actors in blockchain • Discover the related opportunities for blockchain careers in Canada • Understand the societal and economic impacts of blockchain technologies	Padlet Discussion