

H. LAVITY STOUTT COMMUNITY COLLEGE: ROBERT MATHAVIOUS INSTITUTE

CERTIFICATE IN FINTECH

Mission Statement

The HLSCC Robert Mathavious Institute develops and delivers knowledge and skills through training, career enhancement, personal enrichment, continuing professional development, counseling, advisory and consultancy services, to support the human resources needs of the BVI financial services jurisdictions.

Course Objectives:

The objectives of the Certificate in FinTech Course are as follows:

- to support the development of the BVI and Caribbean FinTech Ecosystem;
- to prepare persons for a career in FinTech or to diversify their vocational portfolio;
- to provide partnering firms access to FinTech resources;
- to develop a cadre of certified FinTech professionals;

Course Number: RMI-FINTECS23

Semester: *Spring 2023*

Instructor: various

Office Hrs: *by appointment*

Contact: *Phone (284-852-7081/540-5991); Email: info@rmibvi.com or csliburd@hlsc.edu.vg*

Class Meeting Days/Time: *as per schedule below*

Class Meeting Location: *remote, online delivery*

Pre-requisites: *entrance by application*

Text(s) and Resources: *PowerPoint slides, case studies, course notes and selected articles*

Course Description:

The Future of Finance: Trends and Emerging Technologies in FinTech

Course Structure: 1 Class

Overview: A discussion will ensue on how technology solves business problems in the financial industry. Topics include lending, payments, insurance, regulation, and management. The key issues faced by various segments of the financial industry will be fleshed out along with how FinTech is used to answer this challenge without the need for heavy capital and the advantages/disadvantages banks have over financial technology companies/startups. Examples of technologies used in the financial industry such as artificial intelligence (AI) and machine learning (ML) will also be discussed.

We will also introduce the student “partner” for the course, Generative AI ChatGPT, which has the dual purpose of increasing the participants’ productivity and teaching the value of AI throughout the course.

Learning objectives:

- Learn the key concepts and trends shaping the future of finance, and the role of FinTech in driving these changes.
- Communicate effectively about FinTech trends and emerging technologies to both technical and non-technical stakeholders.
- Know the expectations of the entire program.

Assessment: Quiz

Design Sprint Essentials: A Step-by-Step Guide to Rapid Innovation

Course Structure: 3 Classes

Overview: This course offers an introduction to design sprints (a process for rapid innovation) through hands-on activities, case study exploration, and how companies like Apple, IDEO, Google and more leverage this methodology for constant innovation. Students will learn to adopt a curious and collaborative mindset and apply design thinking concepts to create cost-effective and sustainable solutions. By the end of the course, students will be able to confidently apply design sprints to various business cases.

Learning Objectives:

- Conduct primary research on marketplace needs.
- Make data-driven, timely, and relevant offers, understanding the "moment of truth."
- Collaborate with peers to solve design challenges and gain practical experience in team-based problem-solving.
- Learn how to measure the success of a design sprint and apply these metrics to improve future sprints.
- Explore innovation in MedTech, specifically public-private partnerships and the financial benefits of innovation, through a case study on "Healthcare at your fingertips."

Assessment: Students will be assessed through an end-of-course group presentation.

Enhancing Business Processes with Robotic Process Automation

Course Structure: 2 Classes

Overview: Unleash the transformative power of Robotic Process Automation (RPA) in this dynamic and engaging course, meticulously designed for professionals across business and government sectors. Participants will dive deep into the fundamental frameworks of RPA and learn how to create bots that automate repetitive processes, thereby boosting productivity and freeing up their workforce to focus on higher-value, creative tasks. They will also gain hands-on experience by working on real-world case studies that demonstrate the successful application of RPA in various industries and results in the enhancement of business process linkages.

Learning Objectives:

- Learn how to identify business processes that are suitable for automation and evaluate the potential benefits and risks of RPA.
- Gain insights from an industry expert on how they have successfully implemented RPA in their organization, and how it has impacted their business processes.
- Explore case studies of successful cloud and website development projects and how they have integrated RPA to improve operational efficiency.
- Leveraging Generative AI (OpenAI/ChatGPT) and Cloud to solve business problems.

Assessment: Create a website with a bot incorporated to enhance user engagement

Blockchain, Digital Assets & Smart Contracts: Developing Blockchain-Based Business Solutions

Course Structure: 2 Classes

Overview: This course delves into the innovative world of blockchain technology, with a special focus on digital assets and smart contracts. Participants will gain the knowledge and skills required to develop cutting-edge blockchain-based business solutions. By understanding key benefits and concerns associated with digital assets, learners will explore essential concepts, practical applications, and the potential impact of these technologies on various industries. The course also provides an in-depth explanation of smart contracts, self-executing agreements with the terms of the contract directly written into code, which facilitates, verifies, and enforces contract negotiation and performance. Participants will also discuss their thoughts and ideas on what Caribbean jurisdictions can do to support innovation in fintech and blockchain and mitigate associated risks.

Learning Objectives:

- Be able to explain the fundamentals of blockchain technology, digital assets, and smart contracts.
- Gain insights into the key benefits and concerns of digital assets, such as tokenization, fractional ownership, liquidity, and regulatory compliance.

- Learn how smart contracts automate business processes, reduce intermediary costs, and enhance security and transparency.
- Explore the legal, regulatory, and security considerations associated with blockchain technology and digital assets.
- Assess the potential benefits, risks, and challenges of adopting blockchain technology and digital assets in your organization.

Assessment: Presentation

Actionable Intelligence for Business: Using Data for Better Decisions

Course Structure: 2 Classes

Overview: This business focused course is designed to equip students with the knowledge and skills required to leverage data effectively to enhance the value of their business. In today's competitive landscape, many organizations struggle to transform their massive amounts of raw data into actionable intelligence due to factors such as lack of experience, resources, or a thorough understanding of business concepts and BI tools. By introducing the concept of actionable intelligence, this course aims to address these challenges and help students answer critical questions such as "Where are we today?", "Are we winning?", and "How can we succeed tomorrow?". Students will understand the importance of business led business intelligence projects.

Learning Objectives:

- Develop a strong understanding of data literacy and its vital role in achieving business success through actionable intelligence.
- Learn how to transform raw data into valuable insights by employing data organization and visualization techniques and understanding how to anticipate customer needs through design.
- Discover best practices for using data to optimize business operations, reduce costs, and increase sales by analysing case studies and applying learned concepts.
- Acquire expertise in managing supply chain data to make informed decisions about the movement and distribution of goods.

Assessment: PowerBI Dashboard Insights (due in class on PowerBI)

Actionable Intelligence for Business: Microsoft Power BI

Course Structure: 2 Classes

Overview: This cutting-edge course explores the rapidly evolving field of Business Intelligence (BI) and the essential tools that empower professionals to harness the power of data-driven decision-making. Recognizing that BI extends beyond the realm of technology and data science, this course emphasizes the importance of a comprehensive understanding of both business concepts and BI tools. Participants will delve into the practical application of BI, mastering business concepts, charting fundamentals, and hands-on experience with PowerBI. The course covers all vital concepts required to perform in-depth analyses using PowerBI, equipping learners with the skills to transform raw data into actionable insights.

Learning Objectives:

- Use Design Sprints to develop a dashboard
- Use Generative AI to assist in data story telling
- Create a dashboard that demonstrates the difference in PowerBI vs. Excel
- Practice providing decision support tools to improve business

Assessment: PowerBI Dashboard created with insights

Cybersecurity and Privacy Management: Strategies and Frameworks

Course Structure: 2 Classes

Overview: As we move toward digitalization, the operational risk of cyber-attacks increases. This immersive course guides participants through the critical aspects of cybersecurity and privacy management, focusing on good cyber hygiene. Participants will explore the resources available internationally to collaborate on potential threat assessment, best-practices in defence and support during response. The course emphasizes the importance of protecting sensitive information and provides a comprehensive understanding of various cyber threats, as well as the strategies and frameworks needed to effectively manage them. Special attention will be given to good cyber hygiene practice.

Participants will also learn about the MITRE ATT&CK (Adversarial Tactics, Techniques, and Common Knowledge) Framework, which is a globally accessible knowledge base of adversary tactics and techniques based on real-world observations. The framework is organized into matrices that outline the various stages of a cyber-attack, from initial access to impact.

Learning Objectives:

- Know who to “contact” before, during and after a cyber-attack.

- Improve threat intelligence sharing and collaboration among cybersecurity professionals and organizations.
- Gain insights from industry experts on the latest cybersecurity and privacy management trends, best practices.
- Be able to explain the fundamentals of cybersecurity and privacy management and their crucial role in safeguarding sensitive information.
- Explore the importance of good cyber hygiene practices, with a focus on the financial services sector.

Assessment: Quiz

Capstone Project to solve a business problem using Generative AI (OpenAI/ChatGPT), RPA, Data Storytelling, or Blockchain

Participants will work in groups to design and develop a practical Fintech or automation project for a business, government body, or internally curated HLSCC project. The process will be instructor supervised, providing guidance and support throughout the project's lifecycle. The capstone project offers participants the opportunity to apply the knowledge and skills they have acquired during their coursework to a real-world scenario, enabling them to demonstrate their ability to innovate and problem-solve in the rapidly evolving Fintech and automation landscape.

Learning Objectives:

- Apply the concepts and principles learned in previous courses to design and develop a practical Fintech or automation solution.
- Collaborate effectively with team members to develop a comprehensive project plan, including objectives, timelines, and resource allocation.
- Identify and assess potential risks and challenges associated with the project and develop strategies to mitigate or address them.
- Present the final project to instructors, peers, and industry experts, demonstrating a clear understanding of the chosen Fintech or automation solution and its potential benefits and impact.
- Reflect on the project development process and identify opportunities for personal and professional growth, as well as areas for future learning and exploration.

Assessment: Group project

Methods of Instruction

The course will utilize a combination of lectures, guest speakers, case studies, and group activities to foster an engaging learning environment. Students will work on individual assignments and group projects to apply their knowledge and develop their entrepreneurial skills. Classes will be held on Monday and Wednesday evenings from 7:00 p.m. to 9:00 p.m., starting on May 15th. There will be 8 weeks of classes which is 32 hours of synchronous learning. There will also be a supervised practical work toward the development of a FinTech project for a local firm, or on a project assigned by instructors.

Methods of Assessment:

Students will work on individual assignments and group projects to apply their knowledge and develop their entrepreneurial skills. The assessment distribution is as follows:

- Participation and group activities (20%);
- Individual assignments and case studies (30%);
- Final project: Capstone project on Generative AI, RPA, Data Storytelling, or Blockchain (50%)

Course Schedule: Spring 2023

	Week 1 (May 15, 17)	Week 2 (May 22, 24)	Week 3 (May 30, 31)	Week 4 (June 5, 7)	Week 5 (June 12, 14)
Mon 7:00- 9:00pm	The Future of Finance: Trends and Emerging Technologies in FinTech	Design Sprint Essentials: A Step-by-Step Guide to Rapid Innovation	Enhancing Business with Robotic Process Automation	Blockchain, Digital Assets & Smart Contracts: Developing Blockchain-Based Business Solutions	Actionable Intelligence for Business: Data Literacy is the Key to Business Success
Wed. 7:00- 9:00 pm	Design Sprint Essentials: A Step-by-Step Guide to Rapid Innovation	Design Sprint Essentials: A Step-by-Step Guide to Rapid Innovation	Enhancing Business Processes with Robotic Process Automation: Hands on with Cloud and Website Development. Connection with RPA	Blockchain, Digital Assets & Smart Contracts: Developing Blockchain-Based Business Solutions	Actionable Intelligence for Business: Data is worth Gold

	Week 6 (June 19, 21)	Week 7 (June 26, 28)	Week 8 (July 4, 5)	Week 8..... + month	+ month
Mon. 7:00- 9:00pm	Actionable Intelligence for Business: Microsoft Power BI	Cybersecurity and Privacy Management: Strategies and Frameworks	Group Presentations Faculty Review of Projects Round 1	Business Strategy & Innovation Capstone: Harnessing the Power of Disruptive Technologies to Drive Business	Final Capstone Project Presentations Graduation
Wed. 7:00- 9:00 pm	Actionable Intelligence for Business: Microsoft Power BI	Cybersecurity and Privacy Management: Strategies and Frameworks	Group Presentations Faculty Review of Projects Round 2	3 Capstone Meetings 1. July 2. Aug 3. Sept	

Course Certification:

Upon successful completion of the course, persons will be certificated by HLSCC.

Programme Fees and Payment

Programme Fee: \$5,000 USD

Payment Plans

The course fees can be paid progressively by means of a five-part payment plan. Persons wishing to use this method must complete and sign a payment plan agreement that will be provided by the Fiscal Department, HLSCC.