Module Outline

Professional Qualification:	Associate Fintech Professional (CPFinT(A)) (QF Level 5)
Programme Title:	Professional Certificate for ECF on Fintech
Module Title:	Technology Essentials (M1)*
Credit:	20 (9 contact hours, 2 examination hours and about 189 self-study hours)
Teaching/Training Activities:	Training Class
Pre-requisite:	N.A.

Remarks

1. Exemption will be granted for practitioners who have passed any of the following training / professional programme(s):

   a. **Training Programme (University Degree)**

   - BEng Fintech of Chinese University of Hong Kong; or

   - MSc Fintech of Chinese University of Hong Kong; or

   - BSc Computational Finance and Financial Technology of City University of Hong Kong; or

   - Associate of Science (Financial Technology) of College of International Education, Hong Kong Baptist University; or

   - MSc Finance (Fintech and Financial Analytics) of Hong Kong Baptist University; or

   - BBA (Hon) Financial Technology and Innovation of Hong Kong Metropolitan University; or

   - BSc (Hon) Financial Technology and Artificial Intelligence of Hong Kong Polytechnic University; or

   - Doctor Financial Technology of Hong Kong Polytechnic University; or

   - BCom (Hon) in Financial Technology of Hong Kong Shue Yan University; or

   - MSc Fintech of Hong Kong University of Science and Technology; or

- Advanced Diploma in FinTech of HKU SPACE; or

- Executive Certificate in FinTech of HKU SPACE; or

- Executive Certificate in Banking and Financial Technology of HKU SPACE; or

- BASc Financial Technology of University of Hong Kong; or

- MSc Fintech of University of Hong Kong; or

- MSc Financial Technology and Data Analytics of University of Hong Kong

b. Training Programme (Online Courses)

- Harvard Fintech Online Short Course with Harvard VPAL Premier Certificate of Harvard University; or

- FinTech: Finance Industry Transformation and Regulation Specialization of Coursera of Hong Kong University of Science and Technology; or

- Fintech: Innovation and Transformation in Financial Services of National University of Singapore; or

- The Future of Finance Professional Certificate of edX of University of Texas

c. Professional Programme

- Shenzhen-Hong Kong-Macau Fintech Professional Programme Level 1 of Shenzhen Fintech Association, Chinese Financial Association of Hong Kong, and Macau Institute of Financial Services

- Certificate in Finance and Technology Level 1 of Institute of Financial Technologists of Asia

2. *Pitched at QF Level 5

Professional Qualification Objective

This Professional Qualification is developed to nurture a broad and sustainable talent pool of entry level and junior level Fintech practitioners for the banking industry. Learners will be equipped with professional knowledge and technical expertise to better respond to innovative financial and technological trends.

Professional Qualification Intended Outcomes (PQIOs) for M1, M2, M3 and M4

Upon completion of the Professional Qualification, candidates should be able to:

PQIO 1:	Acquire the key aspects of Fintech application in banking and financial services.
PQIO 2:	Demonstrate in-depth knowledge of the legal and regulatory framework for Fintech governing banking and financial services in Hong Kong.
PQIO 3:	Acquire essential knowledge of the financial system, banking products and services.
PQIO 4:	Integrate and apply Fintech skills and knowledge to tackle banking and financial services industry challenges and develop practical recommendations or solutions.
PQIO 5:	Analyse latest digital developments in Hong Kong and overseas and identify new opportunities for Fintech innovation in banking products, services, and platform.
PQIO 6:	Apply the essential principles and industry standards to support the design, development, and promotion of Fintech solutions.

Module Objective

The module aims to introduce emerging financial and regulatory technologies, including artificial intelligence (AI), big data analytics, distributed ledger technology (DLT), cloud computing, open banking and API, Robotic Process Automation (RPA) and cybersecurity; to introduce Fintech trends, key disruption events in the banking industry and the impact of Fintech developments on banking industry operations; and to introduce local and overseas Fintech applications, use cases and the corresponding implications in the banking space.

Module Intended Outcomes (MIOs) & Units of Competencies (UoCs)

Upon completion of the Module 1, candidates should be able to:

MIOs	Intended Outcome / Competence	Unit of Competencies (UoCs)
MIO 1:	Analyse, evaluate and apply the fundamental technical concepts and principles of emerging Fintech topics to assist in Fintech solution development.	109377L5 109381L5 / 107443L5 109580L5 / 107594L5 107437L5 109365L5 / 107438L5
MIO 2:	Identify the recent and emerging Fintech trends and developments and common Fintech applications in banks.	109377L5 109381L5 / 107443L5 109580L5 / 107594L5 109609L4/ 107622L4 107437L5

Assessment Activity

Type of Assessment Activity	PQIO/MIO	Weighting (%)
Examination	MIO 1 - 2	100%

Examination Format and Duration

Time allowed: 2 hours

The examination consists of 60 Multiple Choice Questions

Examination passing rate: 60%

CPFinT(A) Certification Requirement

- Completion of Module 1-4 of the ECF on Fintech (Core Level) training; and
- Pass in all examinations of Module 1-4; and
- Having at least 1 year of relevant work experience in Fintech projects and / or any of the functions in Fintech Solution Development, Fintech Product Design, Fintech Strategy and Management or Regtech; and
- Currently as a Relevant Practitioner

Syllabus

Chapter 1: Introduction to Financial Technology (Fintech) and Regtech	
1	- Introduction of emerging financial and regulatory technologies
2	- Key concepts and principles of artificial intelligence
3	- Key concepts and principles of big data analytics
4	- Key concepts and principles of distributed ledger technology (DLT)
5	- Key concepts and principles of cloud computing
6	- Key concepts and principles of open banking & API
7	- Key concepts and principles of Robotic Process Automation (PRA)
8	- Key concepts and principles of cybersecurity

Chapter 2: Fintech Trends and Developments	
1	- Recent Key Disruptive Events in Banking
2	- Fintech Development to enhance the Banking Operations and Customer Experience
	• Customer Experience and Centricity
	• Digital Product Services Development
	• Operation Efficiency Enhancement
	• Change Management

Chapter 3: Common Fintech Applications in Banks	
1	- Local and overseas Fintech applications
2	- Use-cases of the following technologies, including
	• Virtual assistant
	• Credit scoring
	• Authentication and biometrics

	• Remote onboarding

Recommended Readings

Essential Readings:

1. Rubini, Agustin (2018). Fintech in a Flash: Financial Technology Made Easy. De G PRESS.
2. Mohan, D. (2020). The Financial Services Guide to Fintech: Driving Banking Innovation Through Effective Partnerships. Kogan Page. (Chapter 1, 2, 7 and 10).
3. Mills, Karen G. (2018). Fintech, Small Business & the American Dream: How Technology Is Transforming Lending and Shaping a New Era of Small Business Opportunity. Springer.
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Supplementary Readings

1. Tanda, Alessandra & Schena, Cristiana-Maria (2020). FinTech, BigTech and banks: digitalisation and its impact on banking business models. Palgrave Pivot.
2. Tanda, A., & Schena, C. M. (2019). FinTech, BigTech and Banks. Springer Publishing.
3. Loesch, Stefan (2018). A Guide to Financial Regulation for Fintech Entrepreneurs. Wiley.

Further Readings

1. Anderson, Ross (2020). Security Engineering: A Guide to Building Dependable Distributed Systems. Wiley.
2. Benedict J. Drasch, André Schweizer and Nils Urbach. (2018) Integrating the 'Troublemakers': A taxonomy for cooperation between banks and fintechs. Journal of Economics and Business. Volume 100, November–December 2018, Pages 26-42. DOI: 10.1016/j.jeconbus.2018.04.002.
3. Valverde, Dantiago Carbo & Fernandez, Francisco Rodriguez (2020). Financial digitalization: Banks, Fintech, Bigtech, and consumers. Journal of Financial Management, Markets and Institutions, 08(01), 2040001.
4. The Hong Kong Monetary Authority (2019). Reshaping Banking with Artificial Intelligence.
5. Brett King (2018). Bank 4.0: Banking Everywhere, Never at a Bank. Wiley.