

# ENHANCED COMPETENCY **FRAMEWORK** on **Fintech (ECF-Fintech)**





#### Associate Fintech Professional

CERTIFIED BANKFR



**Certified Fintech Professional (Management)** (recognised under the QF at level 6, QR Registration No: 22/000867/L6) (validity period from 01/11/2022 - 31/07/2025 )



## **Certified Fintech Professional (Specialist - Artificial Intelligence and Big Data Stream)** (recognised under the QF at level 6, QR Registration No: 22/000868/L6) (validity period from 01/11/2022 - 31/07/2025 )



Certified Fintech Professional (Specialist - Distributed Ledger **Technology Stream**)

(recognised under the QF at level 6, QR Registration No: 22/000869/L6) (validity period from 01/11/2022 - 31/07/2025 )



**Certified Fintech Professional (Specialist - Open Banking and Application Programming Interface Stream)** 



**Certified Fintech Professional (Specialist - Regtech Stream)** 







More Programme details:

(Core Level)

## **Enhanced Competency Framework for Banking Practitioners**

With the aim of supporting capacity building and talent development for banking professionals, the Hong Kong Monetary Authority (HKMA) has been working together with the banking industry to introduce an industry-wide competency framework - "Enhanced Competency Framework (ECF) for Banking Practitioners" in Hong Kong.

The Hong Kong Institute of Bankers (HKIB) is the programme and qualification provider for the ECF on Fintech, with the following objectives:

- To develop a sustainable Fintech talent pool for the banking industry; AND
- To raise and maintain the professional competence of Fintech practitioners in the banking industry.

## **Overview of The Hong Kong Institute of Bankers**

HKIB has been serving the local banking community in the provision of professional training and certification services since 1963. HKIB is the first not-for-profit institution in Hong Kong to issue banking qualifications up to QF Level 6 under the HKQF, and was appointed by the Education Bureau as a Professional Qualifications Assessment Agency in August 2020. With an objective to maintain and further develop the territory's status as an international financial centre, the Institute works with the support of banks, regulators, financial institutions, academic institutions and various professional bodies to provide local banking practitioners with professional training and development opportunities.

In view of the changing landscape of the banking and financial services industry in Hong Kong and mainland China, as well as on a global scale, the importance of continuing to enhance the standards of professional development has gained increased attention. HKIB endeavours to provide and enhance its training and development products in order to equip its members with essential knowledge and skills that meet the industry's needs.

Since the implementation of ECF in 2018, various programmes for different job functions in banking industry have been developed and integrated into HKIB's flagship Certified Banker (CB) Programme which offer generalist, specialist, and strategic topics. The rationale for putting all programmes under one professional banking qualification is to promote an industry-based common qualifications benchmark. While ECF programmes offer "role-based" knowledge and certification to relevant practitioners, CB is offering a vocational qualification pathway for further career advancement, being continuously enhanced to nurture more holistic banking professionals and ultimately, supporting the industry to develop a continuous learning culture and a sustainable talent pool so as to maintain the competitiveness of Hong Kong as an international financial centre.

## **Qualifications Framework**

The Professional Qualification "Associate Fintech Professional (CPFinT(A))" is recognised under the QF at Level 5. (QR Registration No.: 22/000742/L5) (Validity Period from 12/09/2022 to 31/07/2025)

The Professional Qualification "Certified Fintech Professional (Management) (CPFinT(M))", is recognised under the QF at Level 6. (QR Registration No.: 22/000867/L6) (Validity Period from 01/11/2022 to 31/07/2025)

The Professional Qualification "Certified Fintech Professional (Specialist – Artificial Intelligence and Big Data Stream) (CPFinT(S-AIBD))", is recognised under the QF at Level 6. (QR Registration No.: 22/000868/L6) (Validity Period from 01/11/2022 to 31/07/2025)

The Professional Qualification "Certified Fintech Professional (Specialist – Distributed Ledger Technology Stream) (CPFinT(S-DLT))", is recognised under the QF at Level 6. (QR Registration No.: 22/000869/L6) (Validity Period from 01/11/2022 to 31/07/2025)

The Professional Qualification "Certified Fintech Professional (Specialist – Open Banking and Application Programming Interface Stream)" (CPFinT(S-OBAPI))", is recognised under the QF at Level 6. (QR Registration No.: 22/000870/L6) (Validity Period from 01/11/2022 to 31/07/2025)

The Professional Qualification "Certified Fintech Professional (Specialist – Regtech Stream) (CPFinT(S-RT))", is recognised under the QF at Level 6. (QR Registration No.: 22/000871/L6) (Validity Period from 01/11/2022 to 31/07/2025)

Becoming an Associate Fintech Professional (CPFinT(A)) / Certified Fintech Professional (Management Track) (CPFinT(M)) / Certified Fintech Professional (Specialist Track) (CPFinT(S-AIBD)) / (CPFinT(S-DLT)) / (CPFinT(S-OBAPI)) / (CPFinT(S-RT))

	Contified on	Certified as	Contified as	Contified on	Contified on	Contified on
	Certified as	Certified as	Certified as	Certified as	Certified as	Certified as
	Associate Fintech	Certified Fintech Professional	Certified Fintech	Certified Fintech	Certified Fintech	Certified Fintech
Certification	Professional	(Management)	Professional	Professional	Professional	Professional
	(CPFinT(A)) at	(CPFinT(M))	(Specialist –	(Specialist -	(Specialist -	(Specialist -
	QF Level 5 <sup>1</sup>	at QF Level 6 <sup>2</sup>	Artificial Intelligence	Distributed Ledger	Open Banking and	Regulatory Technology
			and Big Data	Technology	Application	Stream)
			Stream) (CPFinT	Stream) (CPFinT	Programming Interface	(CPFinT (S-RT))
~			(S-AIBD))	(S-DLT))	Stream)	at
U			at	at	(CPFinT	QF Level 6 <sup>6</sup>
			QF Level 6 <sup>3</sup>	QF Level 6 <sup>4</sup>	(S-OBAPI)) at	
					QF Level 6 <sup>5</sup>	
Experience	Relevant Practitioners <sup>7</sup>					
	with 1 year		Relevant Practition	ers <sup>7</sup> with 3 years+ r	elevant experience	
<b>^</b>	relevant experience					
Û						
	Obtain	Obtain	Obtain	Obtain	Obtain	Obtain
	Professional	Postgraduate	Postgraduate	Postgraduate	Postgraduate	Postgraduate
Award	Certificate for	Certificate for	Certificate for	Certificate for	Certificate for	Certificate for
	ECF on Fintech	ECF on Fintech (Management	ECF on Fintech (Specialist	ECF on Fintech (Specialist	ECF on Fintech (Specialist	ECF on Fintech (Specialist
	Timeen	Track)	Track –	Track –	Track – Open	Track –
<b>^</b>			Artificial	Distributed	Banking and	Regtech
U			Intelligence and Big Data	Ledger Technology	Application Programming	Stream)
			Stream)	Stream)	Interface	
	505				Stream)	
Training	ECF on Fintech	ECF on Fintech (Professional	ECF on Fintech (Professional	ECF on Fintech (Professional	ECF on Fintech (Professional	ECF on Fintech (Professional
+	(Core Level)	Level) Module 5,	Level) Module 5	Level) Module 5	Level) Module 5	Level) Module 5
Examination	Module 1 - 4	9 & 10	& 6	& 7	& 8	& 11
	+	+	+	+	+	+
	Pass the	Pass the	Pass the	Pass the	Pass the	Pass the
$\mathbf{\uparrow}$	examinations	examination in	examination in	examination in	examination in	examination in
	in Module 1 to Module 4	Module	Module	Module	Module	Module
		5, 9 & 10	5&6	5&7	5&8	5 & 11
Target	Entry Level and Junior					
Target Participants	Level Fintech	Fi	intech practitioners	taking up middle or	senior positions in A	A
Tarticipants	practitioners in Al					
	AI					

<sup>1</sup> QR Registration No.: 22/000742/L5, Validity Period from 12/09/2022 to 31/07/2025.

<sup>2</sup> QR Registration No.: 22/000867/L6, Validity Period from 01/11/2022 To 31/07/2025.

<sup>3</sup> QR Registration No.: 22/000868/L6, Validity Period from 01/11/2022 To 31/07/2025.

- <sup>4</sup> QR Registration No.: 22/000869/L6, Validity Period from 01/11/2022 To 31/07/2025.
- <sup>5</sup> QR Registration No.: 22/000870/L6, Validity Period from 01/11/2022 To 31/07/2025.

<sup>6</sup> QR Registration No.: 22/000871/L6, Validity Period from 01/11/2022 To 31/07/2025.

<sup>&</sup>lt;sup>7</sup> Relevant Practitioners are Fintech practitioners performing functions that involve technological innovation for financial services in an AI in Hong Kong.

#### **Certified Individual (CI)**

CPFinT(A) / CPFinT(M) / CPFinT(S-AIBD) / CPFinT(S-DLT) / CPFinT(S-OBAPI) / CPFinT(S-RT) holders will be registered as CI and included in a public register on HKIB website. The CI Register posted on HKIB website enables the public recognition of CPFinT(A) / CPFinT(M) / CPFinT(S-AIBD) / CPFinT(S-DLT) / CPFinT(S-OBAPI) / CPFinT(S-RT) holders. To ensure your Professional Qualification reflected in the CI register, you are required to maintain a valid membership status with HKIB.

#### **Continuing Professional Development (CPD)**

All CPFinT(A) / CPFinT(M) / CPFinT(S-AIBD) / CPFinT(S-DLT) / CPFinT(S-OBAPI) / CPFinT(S-RT) holders are required to comply with the following annual Continuing Professional Development (CPD) requirements in order to maintain the Professional Qualifications.

- 1. Undertake a minimum of 12 CPD hours for each calendar year (ending 31 December), of which
- 2. At least four CPD hours should be on topics related to innovative technology (e.g. artificial intelligence, big data, cloud computing, cybersecurity, distributed ledger technology, and/or open banking and API), product development, business strategy and marketing, finance and investment, and/or risk and compliance.

For more details, please refer to Continuing Professional Development (CPD) Scheme on HKIB Website. (Home > Membership > Individual Members > HKIB CPD Requirements)

## **ECF on Fintech (Core Level)**

## **Programme Content**

## Module 1 – Technology Essentials

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Analyse, evaluate and apply the fundamental technical concepts and principles of emerging Fintech topics to assist in Fintech solution development.
- Identify the recent and emerging Fintech trends and developments and common Fintech applications in banks.

- Introduction to Financial Technology (Fintech) and Regtech
- Fintech Trends and Developments
- Common Fintech Applications in Banks

## Module 2 – Banking and Risk Essentials

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Differentiate between different banking product offerings and study the differences between retail banking, commercial banking, corporate banking, and institutional banking.
- Recognise expectations for competency of local Fintech talent and stay up-to-date on banking Fintech developments and adopt local and international Fintech regulations and government initiatives.

#### Module Outline

- Retail and Commercial Banking (Fintech-related applications)
- · Corporate and Institutional Banking
- · Contemporary Banking Trends
- · Risk Management and Regulatory Compliance

## Module 3 – Fintech Practicum

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Conduct business analytics, milestone monitoring, and stakeholder communication for Fintech projects.
- Apply the essential principles and industry standards of Fintech product design and development cycle fundamentals, including methodology selection and criteria evaluation.

#### Module Outline

- Business Analysis for Fintech Projects
- · Fintech Product Design and Development
- Fintech Project Management and Reporting

## **Module 4 – Fundamental Fintech Tools and Applications**

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Understand the fundamental concepts of financial technologies (i.e. artificial intelligence, data analytics, cloud computing and blockchain technologies) for Fintech applications in the banking industry.
- Apply appropriate tools, frameworks, programming techniques and services of financial technologies in various use cases in the banking industry.

- Tools and Applications for Artificial Intelligence and Big Data Analytics
- Tools and Applications for Cloud Computing
- Tools and applications for Blockchain and Distributed Ledger Technology

## **Entry Requirements**

The programme is open to both members and non-members of HKIB. Candidates must fulfil the stipulated minimum entry requirements with:

- A Bachelor's Degree in any discipline awarded by a recognised university or equivalent; OR
- An Associate Degree (AD)/Higher Diploma (HD) in a banking, finance and technology or related discipline or equivalent; OR
- A relevant professional qualification; OR
- Mature applicants with at least 3 years of relevant banking experience with recommendations from employer

#### <u>Remark:</u>

- 1. Third or final year of full-time university undergraduate students in banking, finance, technology or related discipline will also be considered.
- 2. Mature applicants (aged 21 or above) who do not possess the above academic qualifications but with relevant banking experience and recommendation from their employers will be considered on individual merit.

## **Medium of Instruction**

- Training is delivered in classroom setting in either Cantonese or English supplemented with English materials.
- All the examination questions are set in English only.

## ECF on Fintech (Professional Level) Programme Content

## Module 5 – Regulatory Trends and Data Ethics

## Learning Outcomes

Upon completion of this module, candidates should be able to:

- Identify the regional Fintech regulatory trends and developments, including cross-border policies and collaborations.
- Recognise and respond to implications of data ethics, integrity, and risks associated with Fintech application opportunities.

## Module Outline

- Regulatory Trends and Developments
- · Requirements on Personal Data and Privacy Protection
- Data Ethics and Data Quality

## Module 6 – Artificial Intelligence and Big Data

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Demonstrate proficiency in the advanced technical concepts, principles, and practical demonstrations of the emerging Artificial Intelligence and Big Data domains to execute problem framing and strategy analytics in conducting Fintech solution development.
- Interpret and leverage current and emerging Fintech use cases, project management techniques, and solution implementation, operation, and maintenance methodologies.
- Recognise the use and applications of Artificial Intelligence and Big Data leveraging cloud services related to data and model.

#### Module Outline

- Technology Overview and Trends
- Machine Learning Algorithms
- Data Architecture and Design
- Analytics Tools, Techniques and Cloud Technologies
- Intelligent Systems Design
- Applications in Banks and Problem Framing
- Data Preparation, Analysis and Interpretation
- Implementation of Artificial Intelligence and Big Data Solutions
- Operation and Maintenance
- · Artificial Intelligence and Big Data Project Management

## Module 7 – Distributed Ledger Technology (DLT)

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Demonstrate proficiency in the advanced technical concepts, principles, and practical demonstrations of the emerging DLT domains to execute problem framing and strategy analytics in conducting Fintech solution development.
- Interpret and leverage current and emerging Fintech use cases, project management techniques, and solution implementation, operation, and maintenance methodologies.

- Technology Overview and Trends
- DLT Architecture and Design
- Digital Tokens and Smart Contracts
- Applications in Banks
- Problem Framing and Solution Analysis
- DLT Solutions Implementation
- DLT Project Management
- DLT Operation and Maintenance
- DLT Security and Oversight

## Module 8 – Open Banking and Application Programming Interface (API)

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Demonstrate proficiency in the advanced technical concepts, principles, and practical demonstrations of the emerging API domains to execute problem framing and strategy analytics in conducting framework and gateway management, API programming, and Fintech solution development.
- Interpret and leverage current and emerging Fintech use cases, project management techniques, and solution implementation, operation, and maintenance methodologies.

#### Module Outline

- Technology Overview
- API Architecture and Design
- · Applications in Banks
- · Problem Framing and Solution Analysis
- API Solutions Implementation
- API Project Management
- API Operation and Maintenance
- API Security and Oversight

## Module 9 – Business Strategy and Marketing

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Drive Fintech adoption through effective means of value proposition, strategic banking roadmap of Fintech implementation, and knowledge of the future Fintech landscape.
- Manage the development of business case for initiating a Fintech project, resourcing, research, and analysis, including modelling techniques to evaluate the impact of Fintech.

#### Module Outline

- The Future of Banking
- Fintech and Innovation Strategies
- Marketing and Value Proposition
- Innovation for Fintech Adoption

## Module 10 – Fintech Product Management

#### Learning Outcomes

Upon completion of this module, candidates should be able to:

- Lead the banking product team to address business problems through advanced project governance and assurance techniques, best practices for agile and innovative project methodologies, and state-of-the-art product development and solution delivery models.
- Apprehend and become adept in the behavioural economics behind customer-centric Fintech products and services in banks.

- Advanced Fintech Applications and Customer Experience
- Fintech Product and Solution Delivery
- Project Governance and Assurance
- Agile and Innovative Organisation

## Module 11 – Regtech

## Learning Outcomes

Upon completion of this module, candidates should be able to:

- Develop robust knowledge of Regtech best practices, Regtech solutions and their effective applications.
- Apply business knowledge to identify, manage, and maintain the best practices on risk management and regulatory compliance.
- Develop a deep understanding of the development processes of Regtech solutions (i.e. development, validation, implementation and governance).
- Demonstrate proficiency in Regtech related technology concepts and principles to be able to select the appropriate technology solution provider and apply technology knowledge for business integration, risk management and regulatory compliance.

## Module Outline

- Regtech Trends, Government Initiatives, and Overview
- Governance and Accountability
- Regulatory Compliance Intelligence
- Financial Crime Prevention
- Conduct and Customer Protection
- Regulatory and Tax Reporting
- Risk Management
- Applications in Banks
- Change Management and Digital Transformation
- Regtech and Data

## **Entry Requirements**

The Programme is open to both members and non-members of HKIB. Candidates must fulfil the stipulated minimum entry requirements with:

- Professional Certificate for ECF on Fintech awarded by HKIB; OR
- Grandfathered for ECF on Fintech (Core Level) by HKIB

## **Medium of Instruction**

- Training is delivered in classroom setting in either Cantonese or English supplemented with English materials
- All the examination questions are set in English only.

## **Application**

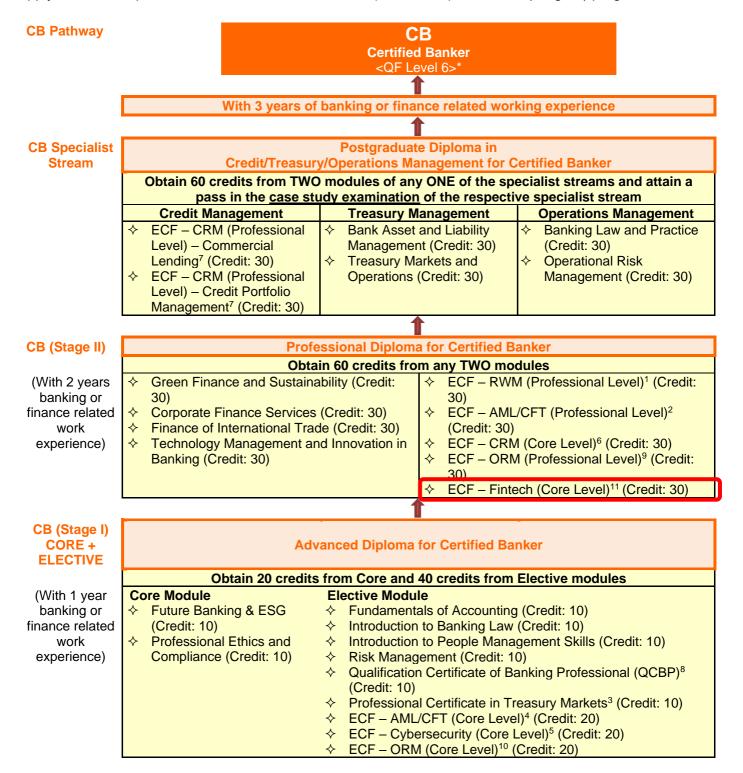
Applicants can submit their application via the electronic application form in HKIB webpage.

## **General Enquires**

Tel:	(852) 2153 7800
Email:	<u>cs@hkib.org</u>
Website:	www.hkib.org
Address:	3/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong

## Integration of ECF in Certified Banker (CB)

Certified Banker (CB) is a professional banking qualification programme developed and offered by HKIB. This common qualification benchmark is intended to raise the professional competency of banking and financial practitioners in Hong Kong to meet modern demands, while providing a transparent standard with international recognition. Individuals who have completed both the "ECF on Fintech (Core Levels" and obtained a pass at the relevant examinations are eligible to articulate to study for CB (Stage II) programme. Candidates can then apply for an exemption for the module "ECF – Fintech (Core Level)" of the CB (Stage II) programme.



#### Notes:

- For exemption only. Holders of the Professional Certificate for ECF Retail Wealth Management (RWM) offered by HKIB are eligible to apply for "ECF - RWM (Professional Level)" module exemption. Please refer to "ECF - RWM" for details.
- For exemption only. Holders of the Professional Certificate for ECF AML/CFT or respective grandfathered certificate are eligible to apply for ECF - AML/CFT (Professional Level) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - AML/CFT</u>" for details.
- 3. For exemption only. Holders of the Professional Certificate in Treasury Markets (i.e., ECF on Treasury Management (Core Level)) offered by LiPACE of HKMU are eligible to apply for module exemption.
- For exemption only. Holders of the Advanced Certificate for ECF AML/CFT or respective grandfathered certificate (plus submission of the form – Recognising Prior Learning Assessment Criteria for ECF - AML/CFT (Core Level) are eligible to apply for module exemption. Please refer to "<u>ECF - AML/CFT</u>" for details.
- For exemption only. Holders of the Advanced Certificate for ECF Cybersecurity offered by HKIB are eligible to apply for "ECF Cybersecurity" module exemption. Please refer to "ECF Cybersecurity" for details.
- For exemption only. Holders of the Core Level Training Certificate for ECF CRM or respective grandfathered certificate are eligible to apply for ECF - CRM (Core Level) – Fundamentals of Bank Lending (M3) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - CRM</u>" for details.
- For exemption only. Holders of the Professional Level Training Certificate for ECF CRM or respective grandfathered certificate are eligible to apply for ECF - CRM (Professional Level) – Advanced Commercial Lending (M4) or ECF - CRM (Professional Level) Advanced Credit Risk Management and Regulatory Requirements (M5) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - CRM</u>" for details.
- 8. Holders of Qualification Certificate of Banking Professional (QCBP) who have passed the QCBP exam are eligible to apply for "QCBP" module exemption.
- For exemption only. Holders of the Professional Certificate for ECF ORM or respective grandfathered certificate are eligible to apply for ECF - ORM (Professional Level) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - ORM</u>" for details.
- For exemption only. Holders of the Advanced Certificate for ECF ORM or respective grandfathered certificate are eligible to apply for ECF - ORM (Core Level) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - ORM</u>" for details.
- For exemption only. Holders of the Professional Certificate for ECF Fintech or respective grandfathered certificate are eligible to apply for ECF - Fintech (Core Level) module exemption after passing the written assessment developed by HKIB. Please refer to "<u>ECF - Fintech</u>" for details.

\* For CB, the Professional Qualification of CB is recognised under the QF at Level 6. (QR Registration No.: 20/000543/L6) Validity period: 1/8/2020 – 31/7/2025