

# ENHANCED COMPETENCY FRAMEWORK on Fintech (ECF-Fintech)





#### Associate Fintech Professional (recognised under the QF at level 5, QR Registration No: 22/000742,



#### **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) (recognised under the QF at level 6, QR Registration No: 22/000870/L6) (validity period from 01/11/2022 - 31/07/2025)



Certified Fintech Professional (Specialist - Regtech Stream) (recognised under the QF at level 6, QR Registration No: 22/000871/L6) (validity period from 01/11/2022 - 31/07/2025)

More programme details:

(Professional Level)







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

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

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**

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. The 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.

### **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))

	Certified as	Certified as	Certified as	Certified as	Certified as	Certified as	
	Certilied as	Centilled as	Centilied as	Centilied as	Centilled as	Centilied as	
	Associate	<b>Certified Fintech</b>	Certified	Certified	Certified	Certified	
	Fintech	Professional	Fintech	Fintech	Fintech	Fintech	
Certification	Professional	(Management)	Professional	Professional	Professional	Professional	
	(CPFinT(A)) at QF Level 5 <sup>1</sup>	(CPFinT(M)) at	(Specialist – Artificial	(Specialist - Distributed	(Specialist - Open Banking	(Specialist - Regulatory	
		QF Level 6 <sup>2</sup>	Intelligence	Ledger	and	Technology	
			and Big Data	Technology	Application	Stream)	
			Stream)	Stream)	Programming	(CPFinT	
			(CPFinT (S-AIBD))	(CPFinT (S-DLT))	Interface Stream)	(S-RT)) at	
$\mathbf{\Lambda}$			at	at	(CPFinT	QF Level 6 <sup>6</sup>	
U			QF Level 6 <sup>3</sup>	QF Level 6 <sup>4</sup>	(S-OBAPI))		
					at		
	Delevent				QF Level 6 <sup>5</sup>		
	Relevant Practitioners <sup>7</sup>						
Experience	with 1 year	Relevant Practitioners <sup>7</sup> with 3 years+ relevant experience					
	relevant				·		
$\mathbf{h}$	experience						
	Obtain	Obtain	Obtain	Obtain	Obtain	Obtain	
	Professional	Postgraduate	Postgraduate	Postgraduate	Postgraduate	Postgraduate	
	Certificate for	Certificate for	Certificate for	Certificate for	Certificate for	Certificate for	
Award	ECF on Fintech	ECF on Fintech (Management	ECF on Fintech (Specialist	ECF on Fintech (Specialist	ECF on Fintech (Specialist	ECF on Fintech (Specialist	
	Fintech	(Management Track)	Track –	Track –	Track – Open	Track –	
			Artificial	Distributed	Banking and	Regtech	
			Intelligence	Ledger	A	Ctroom)	
					Application	Stream)	
			and Big Data	Technology	Programming	Stream)	
仓					Programming Interface	Stream)	
	FCF on	ECE on Fintech	and Big Data Stream)	Technology Stream)	Programming Interface Stream)		
	ECF on Fintech	ECF on Fintech (Professional	and Big Data Stream) ECF on Fintech	Technology Stream)	Programming Interface Stream) ECF on Fintech	ECF on Fintech	
Training	Fintech	(Professional	and Big Data Stream) ECF on Fintech (Professional	Technology Stream) ECF on Fintech (Professional	Programming Interface Stream) ECF on Fintech (Professional	ECF on Fintech (Professional	
Training +			and Big Data Stream) ECF on Fintech	Technology Stream)	Programming Interface Stream) ECF on Fintech	ECF on Fintech	
Training + Examination	Fintech (Core Level)	(Professional Level) Module 5,	and Big Data Stream) ECF on Fintech (Professional Level) Module 5	Technology Stream) ECF on Fintech (Professional Level) Module 5	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5	ECF on Fintech (Professional Level) Module 5	
+	Fintech (Core Level) Module 1 - 4 +	(Professional Level) Module 5, 9 & 10 +	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 +	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 +	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 +	ECF on Fintech (Professional Level) Module 5 & 11 +	
+	Fintech (Core Level) Module 1 - 4 + Pass the	(Professional Level) Module 5, 9 & 10 + Pass the	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the	
+	Fintech (Core Level) Module 1 - 4 +	(Professional Level) Module 5, 9 & 10 +	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 +	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the examination in	
+	Fintech (Core Level) Module 1 - 4 + Pass the examinations	(Professional Level) Module 5, 9 & 10 + Pass the examination in Module	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in Module	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the examination in Module	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in Module	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the	
+	Fintech (Core Level) Module 1 - 4 + Pass the examinations in Module 1 to Module 4	(Professional Level) Module 5, 9 & 10 + Pass the examination in	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the examination in	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the examination in Module	
+ Examination	Fintech (Core Level) Module 1 - 4 + Pass the examinations in Module 1 to	(Professional Level) Module 5, 9 & 10 + Pass the examination in Module	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in Module	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the examination in Module	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in Module	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the examination in Module	
+ Examination Î Target	Fintech (Core Level) Module 1 - 4 + Pass the examinations in Module 1 to Module 4 Entry Level	(Professional Level) Module 5, 9 & 10 + Pass the examination in Module 5, 9 & 10	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in Module 5 & 6	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the examination in Module 5 & 7	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in Module	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the examination in Module 5 & 11	
+ Examination	Fintech (Core Level) Module 1 - 4 + Pass the examinations in Module 1 to Module 4 Entry Level and Junior	(Professional Level) Module 5, 9 & 10 + Pass the examination in Module 5, 9 & 10	and Big Data Stream) ECF on Fintech (Professional Level) Module 5 & 6 + Pass the examination in Module 5 & 6	Technology Stream) ECF on Fintech (Professional Level) Module 5 & 7 + Pass the examination in Module 5 & 7	Programming Interface Stream) ECF on Fintech (Professional Level) Module 5 & 8 + Pass the examination in Module 5 & 8	ECF on Fintech (Professional Level) Module 5 & 11 + Pass the examination in Module 5 & 11	

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

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

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

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

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

<sup>&</sup>lt;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. FIN-P-002

#### **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.

### 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

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

- 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.

## 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.

- 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

## 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 9 – Business Strategy and Marketing

#### Learning Outcomes

Learning Outcomes

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

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

• Interpret and leverage current and emerging Fintech use

cases, project management techniques, and solution

implementation, operation, and maintenance methodologies.

programming, and Fintech solution development.

- 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 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.

#### Module Outline

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

- 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 Outline

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

- 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**

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Email:	<u>cs@hkib.org</u>
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