# Pay ments in Digital Finance

Specialisation Brochure





# **About the Specialisation**

You might have heard that banks no longer dominate the payments sphere. How did that happen? And what does it mean for the Financial Services industry?

In the Payments in Digital Finance Specialisation, you will explore how a rapidly changing technology landscape is transforming the payments ecosystem at an unprecedented rate.

Leaders in technology, regulations, digital innovation and public policy have come together to design 6 short courses that cover all facets of new digital payments. Guided by top industry experts, you will develop a solid understanding of the past, present, and future of payments.

You also have the flexibility to enroll in the full specialisation or to start with a couple of the short courses. Keen to learn more about new technologies and innovations, such as Distributed Ledgers and Central Bank Digital Currency (CBDC)? Or are you here to deep-dive in digital payments regulations? Regardless of your background, this Specialisation is designed for you.

The Payments in Digital Finance Specialisation is co-created by the Centre for Finance, Technology and Entrepreneurship (CFTE) and the Budapest Institute of Banking (BIB).





#### How CFTE Specialisations work?

Learning Tracks. CFTE's specialisations are learning tracks composed of a number of short courses, delivered fully online. They are designed to give you an extensive understanding of all the facets of a subject or topic.

Designed by you. As a learner, you can enroll in the full specialisation or you can select individual courses that interest you more. You will have unlimited access to our custom-built online education platform

To fit your needs. Our courses are designed to allow you to be fully in control of what, how, and when you want to learn.

And support your personal and career development. Upon the successful completion of a course, you will receive a Certificate of Completion. If you pass all 6 courses, you will be awarded the Specialisation Certificate.



You work in the payments industry, regardless of your area of expertise 2

Your company operates in one of the sectors that are challenging banks' payment businesses, including Fintechs,



Your company has a significant volume of payments, or if payments are critical to your business operation



You are an expert in other areas of financial services and require a better understanding of payments



You would like to build a future career in the payments industry.

Whether you are part of the CXO suite, a middle manager in charge of digital transformation in payments, a fintech founder or an employee, the Payments Specialisation is designed to cater for your learning needs.



# Specialisation Structure



**On-Demand** Enrol and Start immediately



Shareable Certificate Recieve a certificate per course and for the full specialisation



100% Online & Self-Paced Learn Whenever, Wherever



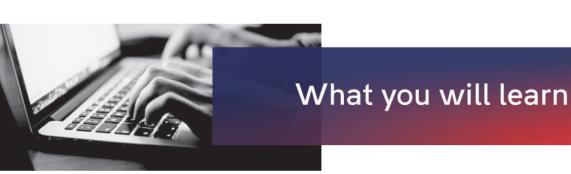
Finish in 6 Weeks Dedicate 2-3 hours per week



Flexible Learning Track
Design your learning track
with 6 individual courses on
offer



Global Community
Earn lifetime access to the
CFTE Global Alumni
Community





Discover the role and evolution of payments from 3 standpoints: historical, economic and social



**Explore** the role and importance of regulations in the payments industry and analyse regional differences



Recognise and differentiate between traditional and new payment methods



Understand the new techologies that are enabling product innovation in payments



**Learn** how successful payments digitial transformation programs are designed and executed



Identify the key players in the payments ecosystem and understand the fundamentals of the payments stack



**Explain** the new business models in payments and identify the different monetisation strategies



# Who you will learn from

# **Programme Directors**



Fabian Vandenreydt Specialisation Program Director

Fabian Vandenreydt is Belgian and has over 25 years of experience in capital markets post-trade, payments, market infrastructures, corporate innovation & strategic partnership development. He is the founder Fabian VDR Advisory Services, which specialises in market structures, governance, business & operational models, mindset & culture, for sustained digital transformation & corporate innovation in finance technology.

In 2019, he was appointed as the Innovation Ecosystem Advisor to the Chairman of Abu Dhabi Global Market (ADGM). He is also an Industry Partner at Motive Partners, a private equity investment firm focused on financial services, and an advisor to several fintech companies in the field of applied machine learning & digital asset servicing technologies. Fabian also co-founded the Global Fintech Hub Federation in collaboration with U.K. Innovate Finance.



Gabor Dalnoki

Specialisation Program Director

Gabor is an innovative manager with a strong technological background and extensive experience in the financial services sector. He started his career as a corporate banker; for a decade, he built successful teams and organisations in several countries around the world.

After banking, Gabor worked as a PMO in an IT-based financial institution, where he faced the challenges of implementing new solutions in established environments with legacy systems. He managed the transformation of a key player, which emerged as an innovative player in the Hungarian financial market, offering new digital solutions. Gabor holds an executive MBA, MSc in Technology Management and several certifications in Big Data, SQL, and Innovation Management.

## Senior Lecturers



Jean-Michel Godeffroy

Course 1 Senior Lecturer

Jean-Michel Godeffroy is an independent consultant based in Paris. In 1998, he became the youngest Director General at the European Central Bank (ECB), in charge of payments and market infrastructure issues, until he retired in 2014 to create his consulting firm. He has an extensive career in payments, with almost 40 years of experience in institutions such as Banque de France, Federal Reserve Bank of New York and Bank for International Settlements.

He currently advises central banks all over the world, either directly or through the World Bank and the International Monetary Fund (IMF). He is also a senior advisor to the Arab Monetary Fund and the chairman of the Central Bank Payments Conference. In addition, he also acts as senior advisor to private companies, especially on instant payments and on central bank digital currencies.



Fred Bär Course 2 and 6 Senior Lecturer

Fred Bär is a partner in Payments Advisory Group, an international business consultancy specialized in payments. He has advised on PSD2-related topics, on Instant Payments developments in Europe and recently on the launch of the Vietnamese NAPAS ACH (with World Bank/IFC). He is the Secretary General of the European Automated Clearing House Association, of which he is also a former President.

Fred was Director at various payments processors (equensWorldline, EBA Clearing, Vocalink), a Board Member of International Giro Services, and a Board member of Interpay EGI, the first Dutch E-Money Institution. Prior to payments, Fred worked in the Telco-, Energy- and IT-industries. He is married, has four children and lives in the Netherlands.



Kim Ford Course 3 Senior Lecturer

Kimberly (Kim) Ford is Senior Vice President, Government Relations, at Fiserv. She is responsible for development and implementation of the company's policy strategy and overall political advocacy engagement and represents Fiserv's political interests as the company's registered lobbyist in Washington, D.C.

Kim joined Fiserv from the U.S. Faster Payments Council (FPC), a business trade association focused on accelerating the implementation of faster payments in the U.S. She was the first Executive Director of the organization. Prior to her FPC work, she spent 15 years at First Data, starting her career there as Manager of Public Policy and rising to become Senior Vice President, Head of Global Government Affairs. During which time she also served on the board of the Electronic Funds Transfer Association, the Innovative Payments Association, the Secure Payments Partnership, and the Card Coalition. Prior to her career at First Data, she was Regional Director for U.S. Senator Bill Nelson of Florida.



Micheal O'Loughlin Course 4 Senior Lecturer

Michael brings 15 years of experience in driving and fostering banking and payments innovations around the world (Citi, KPMG, CGI, Token). His particular expertise lies in the field of emerging technologies and global finance, acquired in strategy, advisory and startups.

He is the founding member of the MENA Fintech Association and active member of the Arab Monetary Fund. He is a regular speaker at international conferences, presenting on the key financial services themes of the day. He is a faculty member of the Euro Bankers Association School and continues to develop a reputation as the trusted board advisor. Michael is recognised as a thought leader with a deep understanding of the rapidly evolving global payments landscape.



Ritesh Jain
Course 5 Senior Lecturer

Ritesh is a Thought Leader, IT executive & Board Advisor with two decades of global experience in Digital Technology, Business Transformation, and Operations with fortune 500 companies like HSBC, VISA, Maersk to name a few. He led milestone changes in Financial Services, Fin-tech, Shipping, Telecom, and Government. Driven future of payments for VISA, delivered Apple Pay for VISA & Apple. Led transformation at Maersk & introduced milestone changes in the shipping industry and led recovery from the most significant cyber incident (Not Petya) in the industry.

As a founder CTO built the first Robot Advisory platform and scaled it. Apart from Technology, Ritesh is an expert in Payments, Banking & Financial Services, Regulatory - KYC/AML, Open Banking/ PSD2, high transaction platform and services, reduction in operational cost and optimisation.

# **Guest Experts**

Andrea Dunlop,

Advisory Board Member, RTGS, EWPN & EPA



Carlo Palmers,

Head of Payment Solutions, SWIFT



Charles Delingpole,

Founder and CEO, ComplyAdvantage



Ebi Atawodi,

Head of Product Payments, Uber

Francois Masquelier,

CEO, Simply Treasury



Gabriela Guibourg,

Head of Analysis and Policy, Sveriges Riksbanken



Gaston Aussems,

Former CEO, Mollie



Georgie Smallwood,

Former Product Officer, N26



Gert Bijleveld,

Entrepreneur and Senior Associate, Payments Advisory Group



Giang Pham Thi Huong,

Head of Business Development, National Payment Corporation Vietnam



Grace Chong,

Of Counsel, Simmons and Simons



Jozef Czimer,

Advisor to CEO, Capsys





#### Julien Le Goc,

Director of Policy, Diem (Libra)



#### Kennedy Mubita,

Africa and ME Lead, Standard Chartered Ventures



#### Konstantin Peric,

Deputy Director, Financial Services for the Poor, Bill and Melinda Gate Foundation



#### Lajos Bartha,

ED, Financial Infrastructures and Banking Operations, Central Bank of Hungary



#### Navin Gupta,

Managing Director SE and MENA, Ripple



#### Nick Ogden,

Founder, RTGS Global and Clearbank



#### Olaf Ransome,

Founder, 3C Advisory



#### Reed Luthanen,

Executive Director, US Faster Payments Council



#### Sandra Alzetta,

Global Head of Payments, Spotify



#### Serey Chea,

Assistant Governor, National Bank of Cambodia



#### Soeren Rode Jain Andreasen,

Chief Digital Officer, Danske Bank



#### Sopnendu Mohanty,

Chief Fintech Officer, Monetary Authority of Singapore



# Payments in Digital Finance Curriculum



Discover the evolution of money and payments. From the analysis of the role of money, money supply, and settlements in the modern monetary system, to the rise of digital payments, cryptocurrencies and changing consumer behaviour.

#### Chapter 1 A Short History of Money and Payments

- 1.1 Definition of Payments and the Link With Money
- 1.2 Money in History (Until the 1990s): An Ongoing Evolution
- 1.3 The Lessons of history

# Chapter 2 Means of Payments Today: An Analysis of the Money Supply

- 2.1 An Analysis of the Money Supply
- 2.2 The Critical Role of Money Creation by Banks: Why Loans Make Deposits
- 2.3 The Marginal Role of Central Banks in Direct Money Creation
- 2.4 Electronic Money

# Chapter 3 Payments and Settlements in the Modern Monetary System

- 3.1 The Evolution of the Role of Central Banks
- 3.2 The Fungibility Between Payments in Public Money and Private Money
- 3.3 Monetary Policy in a Nutshell

#### Chapter 4 Public Policies Related To Payments

- 4.1 Competition vs Cooperation
- 4.2 Changing Customer Preferences
- 4.3 Payments and Financial Inclusion
- 4.4 The Geopolitics of Payments

#### Chapter 5 The Future of Money and Payments

- 5.1 Clarifying Definitions
- 5.2 A Focus on Bitcoins and Libras: Can They Be Considered as Money?
- 5.3 Central Bank Digital Currencies (CBDC)

# Course 2 Payments Stack: Industry Fundamentals

Learn the important payment business domains, the different industry actors and the fundamentals of the payments stack. Explore global payments standards and operations and understand how payment economics are changing.

#### Chapter 1 Payment Business Domains Today

- 1.1 Payment Accounts
- 1.2 Payment Instruments and Types of Payments
- 1.3 Payment Processing Flow
- 1.4 Regulatory & Legal Frameworks

#### Chapter 2 Actors & Industry Structure

- 2.1 Payment Account Provision
- 2.2 Payment Schemes
- 2.3 Card Schemes
- 2.4 Infrastructures: A General View
- 2.5 Collaboration and Competition

#### **Chapter 3 Payment Methods**

- 3.1 Payment Contexts
- 3.2 Categories for Analyzing Payments
- 3.3 Payment Overlay Services
- 3.4 Instant Payments: A Global Trend

#### Chapter 4 Standards and Infrastructures

- 4.1 Payment Standards
- 4.2 Account Related Standards
- 4.3 Payment Message Standards
- 4.4 Other Standards
- 4.5 Infrastructures: Routing and Clearing
- 4.6 Infrastructures: Settlement

#### **Chapter 5 Payment Operations**

- 5.1 Operating Models for Payment Function
- 5.2 Operational Flow Process
- 5.3 Operating Payments in Large Organisations
- 5.4 Issuing Acquiring Operations
- 5.5 Traditional Bank Operations are evolving
- 5.6 Professional User Operations

# Chapter 6 Key Revenue and Expense Elements in the Payment Industry

- 6.1 Payments Economics in the P&L: Evolution and Revolution
- 6.2 Payment Economics: Revenues



# Payments in Digital Finance Curriculum Continued



#### Course 3 The Global Regulatory Landscape of the Payments Sector

Explore different payment regulations in the European Union, United States and Asia-Pacific. Understand the 'who, what and why' of risk management, security and data privacy processes.

#### Chapter 1 Understanding the Who, What, and Why of Payments Regulation in the European Union

- 1.1 The European Union Regulators
- 1.2 Cross Border Payments Within the EU
- 1.3 PSD2
- 1.4 EU Interchange Regulation
- 1.5 Regulation of European Faster Payments Systems

#### Chapter 2 Understanding the Who, What, and Why of Payments Regulation in the United States

- 2.1 Payments Regulators
- 2.2 Laws Governing Electronic Payments
- 2.3 Debit Interchange Regulation
- 2.4 Regulatory Approach to Faster Payments

#### Chapter 3 Understanding the Who, What, and Why of Payments Regulation in Asia

- 3.1 Payments Regulators
- 3.2 Cross Border Payments in Asia
- 3.3 E-Payments Regulation
- 3.4 Interchange Regulation
- 3.5 Regulation of Faster Payment Systems in Asia

#### Chapter 4 Financial Crimes Compliance

- 4.1 Definitions
- 4.2 The Financial Action Task Force
- 4.3 Anti-Money Laundering (AML) Regulations
- 4.4 Terrorist Financing Regulations
- 4.5 Sanctions Screening Regulation

#### Chapter 5 Data Privacy and CyberSecurity Regulations

- 5.1 The EU's Approach to Data Privacy
- 5.2 The US's Approach to Data Privacy
- 5.3 Asia's Approach to Data Privacy
- 5.4 Global CyberSecurity Requirements
- 5.5 Regulatory Relationship Between Data Privacy and CyberSecurity

#### Chapter 6 Regulatory Initiatives Affecting Emerging **Payments**

- 6.1 Central Bank Digital Currency
- 6.2 Cryptocurrency Regulation
- 6.3 Open Banking
- 6.4 Regulatory Sandboxes

#### Course 4 New Payment Technologies and Product Innovations

Understand new technologies, such as IoT, AI, DLT and CBDC, and their impact on product innovation in Paytech. Dive into the key areas leveraging data and AI to improve customer experience and combat fraud..

#### Chapter 1 What Does a Modern Payment Tech Stack Look Like?

- 1.1 The Payments Stack
- 1.2 The Key Players in the Modern Payments Stack
- 1.3 Collaboration Is the Key To Success

#### Chapter 2 Technology-Driven Innovation in Action: Key **Areas and Actors**

- 2.1 New Disruptive Technologies in Payments
- 2.2 Key Players and Their Disruptive Technologies
- 2.3 Ripple

#### Chapter 3 Leveraging Data & Al To Improve Customer **Experience and Combat Fraud**

- 3.1 Payments Fraud and Financial Crime Prevention Technologies
- 3.2 Existing Tools and Solutions
- 3.3 Case Study: ComplyAdvantage

#### Chapter 4 The Next Frontier In Payments: Internet of Things (IoT) and Invisible Payments

- 4.1 Internet of Things and Payments
- 4.2 The Smart Economy
- 4.3 Success Factors for IoT and Payments

#### Chapter 5 Potential Impact of DLT and CBDC on Payments

- 5.1 DLT for Financial Services: Retail vs. Wholesale
- 5.2 The Essential Ingredients for the Tokenized and DLT Landscape
- 5.3 CBDC and Its Variants: Stablecoins and Other Forms of Money & Payment





#### Course 5 Payment Strategies & **Business Model Innovations**

Identify the key players in the payments ecosystem and learn about new business models and monetisation strategies, including data monetisation. Understand the fundamentals of Open Banking and the future trend of Open Finance.

#### Chapter 1 The Payments Business: Who Makes Money in **Payments**

- 1.1 The Key Players in the Payments Business
- 1.2 Innovation in Current Revenue Models
- 1.3 Payment Monetisation in Retail Through Partnerships

#### Chapter 2 Overview of Key Business Model Innovations

- 2.1 Context for Business Model Innovations
- 2.2 Key Examples of Business Model Innovation
- 2.3 Monetisation Through Partnership

#### Chapter 3 Data Monetisation in Payments Business

- 3.1 Potentials of Payments Data
- 3.2 Innovation in Data Monetisation
- 3.3 Impediments in Data Monetisation

#### Chapter 4 Open Finance Reshaping the Banking and Payments Industry

- 4.1 What is Open Banking?
- 4.2 Open Banking Paving the Way for Open Finance
- 4.3 Open Finance/Banking: A Revenue Generation Model?
- 4.4 Open Finance/Banking: Impact on Financial Inclusion
- 4.5 Open Finance: The Way forward

### Course 6 The Rationale for a Payments **Digital Transformation Programme**

Learn how to kick-off and run a payments digital transformation and innovation program. Acquire the tools to transform your (e-) business and corporate finance functions.

#### Chapter 1 What Needs To Be Transformed: The Rationale for a DT Program

- 1.1 Payments in the Business Process
- 1.2 Drivers of Payments Digital Transformation
- 1.3 Who Pays What Across the Value Chain
- 1.4 Payments as Part of Whole-Bank-Digital Transformation

#### Chapter 2 How To Kick-off and Run a Payments DT Innovation Program

- 2.1 What Is a Digital Transformation Program?
- 2.2 Setting Direction and Goals
- 2.3 Engaging Stakeholders
- 2.4 Planning, Organisation and Continuous Delivery

#### Chapter 3 Leveraging the Digital Payments Ecosystem To Transform Your e-Business

- 3.1 Merchant Needs for Payments
- 3.2 New Payments Instruments: Impact on (e-) Merchant Business
- 3.3 New Payment Forms and Functions
- 3.4 Costs
- 3.5 Business Case: A Generic Approach

#### Chapter 4 Leveraging the Digital Payments Ecosystem To **Transform Your Corporate Finance Functions**

- 4.1 Corporate Treasury: Needs of Large Payment Users
- 4.2 New Payments Instruments: Impact on the Corporate Treasury Functions
- 4.3 Payments and Corporate Core Business Interactions
- 4.5 Business Case: A Generic Approach



# **FAQ**

#### How do I learn?

For each course that you have registered for - all courses if you have signed up to the specialisation - you will have full access to a collection of on-demand video lectures, expert interviews, and assessed multiple-choice questions. Additionally, each chapter in a course also contains a lecture note, a glossary, as well as a series of required and recommended reading materials which are all downloadable for you to keep without expiry.

Moreover, your education doesn't end on completion of the course as you would have been given a lifetime membership of the CFTE Global Alumni Community.

The Finance industry is well-known for its constant change, how do I know that the content is up-to-date?

With Finance, Technology, and Entrepreneurship at the core of our education platform, CFTE and our partners update all courses at least once a year (and in many cases, a few times a year) to ensure that our content is always up-to-date and beneficial to our learners.

Hence, do not be surprised if your experience differs slightly from your colleague's experience from 3 months ago!

#### How many certificates do I get?

You will get a Certificate of Completion for every course that you have completed, provided that you have scored at least 80% in all of the quizzes and the final assessment.

Upon completion of all the courses for the specialisation, you will receive another certificate to recognise that you have satisfied all of the conditions to graduate from the specialisation.

#### What is the CFTE Global Alumni Community?

A network of over 40,000 professionals around the world, every individual who has studied with CFTE is invited to become a member of the online community, and of their local chapters (currently based in London, Singapore, and Hong Kong). Alumni are invited to exclusive networking events, social events, masterclasses, and gain priority & discounted access to any of our new courses in the future.



# How Do I Enrol?

#### Enrol at:

https://my.cfte.education/bundles/payments-in-digital-finance

**Specialisation** 

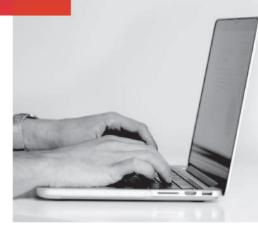
£900

£300 x 3 or Monthly Instalments



£180

6 Courses Seperately cost £1080



# Accreditation

Magyar Nemzeti Bank (Central Bank of Hungary) Accredited









Association of Corporate Treasurers Accredited





#### Centre for Finance, Technology and Entrepreneurship (CFTE)

A global education platform that aims to equip financial professionals and organisations with the necessary skills to remain competitive in a rapidly changing industry. With offices in London, Singapore, Hong Kong and Abu Dhabi, CFTE partners with Fortune 500 companies to build their knowledge in Financial Technology, whilst simultaneously supporting their digital transformation process.

#### **Budapest Institute of Banking (BIB)**

Our vision is to become an internationally recognised financial education institution and a market-leading financial education provided in our domestic market through our high quality, modern, innovative and experienced based learnings.





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