DIGITAL FINANCE AND BEYOND

B • FinTech

2022-2023













Welcome to the Faculty of Business (FB) of PolyU.

FB is a world-class business school that offers high-quality academic programmes and leads cutting-edge research in business and related disciplines. We have achieved accreditations from AACSB (The Association to Advance Collegiate Schools of Business) and EQUIS (EFMD Quality Improvement System).

FB is dedicated to the pursuit of *IDEAS* (*Innovation-driven Education and Scholarship*) with a 3D focus on Discovery, Design and Delivery. We realise knowledge and technology transfer through educational programmes, as well as partnership and close links with industry and the professional community.

FB offers a comprehensive portfolio of undergraduate and postgraduate programmes, many of which are recognised by professional bodies in the fields of accounting, finance, logistics, management, marketing and transport. Apart from the BBA, MBA, DBA, and specialised master's and doctoral degrees, there are also research programmes leading to the MPhil and PhD awards.

To maintain currency of our academic programmes and specialist consultancy, faculty members undertake pioneering and impactful research, both within and across their disciplines, facilitated by our centres for Belt and Road development, branding and marketing, digital transformation, financial technology, leadership and innovation, maritime studies, shipping and logistics, and sustainability and entrepreneurial finance. Our research has been ranked 63rd in the world (*The UTD Top 100 Worldwide Business School Rankings based on Research Contributions 2017-2021*).

We look forward to welcoming you to our community of over 170 world-class scholars from around the world, 4,900 students and 54,000 alumni.

Ir Prof. T.C. Edwin Cheng

IASCYS Academician, FHKEng, ScD, PhD

Adwin Cherry

Dean, Faculty of Business

Fung Yiu King – Wing Hang Bank Professor in Business Administration

Chair Professor of Management



I am pleased to introduce you to Doctor of FinTech (DFinTech) programme, the first-ever professional doctorate in financial technology, offered by The Hong Kong Polytechnic University (PolyU).

Digital transformation is reshaping the financial services landscape as well as bringing about new challenges and opportunities to businesses. Understanding and applying digital technologies have become crucial to the development or even survival of an organization. With the aim to educate "scholar-leaders" in the FinTech area, our programme helps senior executives integrate digital knowledge and perspective with their actual practice to enhance strategic management and leadership in FinTech and other areas.

PolyU DFinTech is a cross-disciplinary and rigorous programme which draws upon the pooled resources of different faculties within the University. With academic papers publishing in prestigious international journals, our subject professors are experts in big data analytics, artificial intelligence, blockchain, smart city, digital supply chain management, digital marketing and FinTech economics.

As FinTech is boundless, international collaboration has been established with the world-famous IMD (International Institute for Management Development) so that our DFinTech students have the opportunity to go there to take an executive programme on digital business.

PolyU DFinTech programme will equip you with frontier knowledge in FinTech and related areas, a new mindset and tools to take your organization to a new level in the digital era.

Prof. Wilson Tong

DFinTech Programme Director Professor of Practice (Finance) School of Accounting and Finance

WHY POLYU **DFINTECH**

- Pioneering FinTech doctorate in the world
- Benefit from pooling resources from different faculties of the university
- Integrate academic study, applied research and management practice
- Embrace digital transformation and technological innovations
- Explore the potentials and promises of digital technology in business
- Become part of an elite network of over 600 alumni and students

INTERNATIONAL COLLABORATIONS





To increase the international exposure and academic vigour of the programme, students have the opportunity to participate in a digital transformation programme with the IMD Business School in Switzerland and the Executive Education Courses offered by The London School of Economics & Political Science (LSE) in the U.K..

ACADEMIC TEAM



CAO Jiannong BSc (Nanjing University), MSc, PhD (Washington State University), FIEEE, DMACM, SMCCF
Otto Poon Charitable Foundation Professor in Data Science

Chair Professor of Distributed and Mobile Computing
Department of Computing

Associate Director, University Research Facility in Big Data Analytics

Research and Teaching Interests

Parallel and Distributed Computing, Wireless Sensing and Networks, Pervasive and Mobile Computing, Big Data and Cloud Computing

CHAN, Chun Bun Henry BA, MA (Cambridge), PhD (British Columbia), MIEEE Associate Professor and Associate Head (Partnership & Collaboration)
Department of Computing

Research and Teaching Interests

Networking and Communications, Cloud Computing, Internet Technologies, and Electronic Commerce





GUO Song PhD (uOttawa); FIEEE Professor Department of Computing

Research and Teaching Interests

Big Data, Mobile Computing, Cloud Computing, Distributed System

LIU Xintao *BEng, MSc, PhD*Assistant Professor
Department of Land Surveying and Geo-Informatics

Research and Teaching Interests

GISci, Complex Network, Transportation Geography, Urban Computing, Geographic Information Systems, Geomatics Algorithms and Geodatabase, Infrastructure and Utility Management





Professor

Department of Land Surveying and Geo-Informatics

Research and Teaching Interests

Global Navigation Satellite System (GNSS) Theory and Applications, Space Geodesy, Engineering Surveying, Atmospheric Remote Sensing Using GNSS Technique, the lonospheric Study and Modelling Based on GNSS Data, Advanced Surveying Data Adjustment and Analysis, Satellite Positioning and Navigation, Hydrographic Surveying, Mapping





OU, Y. Amy BEcon (Peking), MMgt (Peking), PhD (Arizona State)
Associate Professor
Department of Management and Marketing

Research and Teaching Interests

Leader Humility, Organizational Culture, Strategic Leadership, Women Career Management

SHI, Wen-zhong John BEng, MEng, DNatSc, FRICS, FHKIS, FHKIES
Otto Poon Charitable Foundation Professor in Urban Informatics
Chair Professor in GlSci and Remote Sensing
Director, PolyU-Shenzhen Technology and Innovation Research Institute (Futian)
Director, Smart Cities Research Institute

Research and Teaching Interests

GISci, Remote Sensing and Urban Informatics, focusing on Analytics and Quality Control for Spatial Big Data, Object Extraction and Change Detection from Satellite Images and LiDAR Data, Integrated Indoor Mapping Technology, 3D and Dynamic GISci Modelling, and Smart City Applications, Geographical Information Systems Concepts and Principles, Advanced Geographical Information Systems, Design and Development of Geographical Information Systems









WEI Steven BSc, MSc, MA, PhD

DFinTech Deputy Programme Director

Deputy Director, AMTD FinTech Centre of PolyU Faculty of Business

Associate Professor

School of Accounting and Finance

Research and Teaching InterestsFinance and Financial Services

WONG, Man-sing Charles BSc, MPhil, PhD, Fulbright, MHKInstES, MRICS, MHKIS Associate Professor & Associate Head (Academic) Department of Land Surveying and Geo-Informatics

Research and Teaching Interests

The Use of Remote Sensing to Study Urban Heat Island Effect, Urban Environmental Quality, Landslides, Vegetation and Ecosystems, Spectral Mixture Analysis, Aerosol Retrieval, Air Quality Monitoring and Water Vapor Retrieval; Applications of Geographical Information Systems to Analyse Wind Ventilation Corridors, 'Wall-effect' Buildings, and Spatial Inequity; Sensors Development and Integration for Micro-Environmental Monitoring





XIAO Guang BSc, MSc, PhD
Assistant Professor
Department of Logistics and Maritime Studies

Research and Teaching Interests

Operations Management, Supply Chain Management, Integrated Risk Management, Socially Responsible Operations

XU Xin BEcon, MPhil, PhD
Associate Dean (External Relations and Development), Faculty of Business
Associate Professor, Department of Management and Marketing

Research and Teaching Interests

IT Service Management, IT Innovation and Consumers, Human Computer Interaction, Mobile Computing, Social Media and Business Analytics





XU Yang BSc, MSc, PhD
Assistant Professor
Department of Land Surveying and Geo-Informatics

Research and Teaching Interests

Space-Time GIS, Human Mobility Mining and Modelling, Urban Data Analytics and Visualization, Transport Geography, Computational Social Science, Geographic Information System, Spatial Analysis, Geospatial Database



PROGRAMME DETAILS

Objectives

This programme aims to educate top executives and business entrepreneurs who are interested in understanding the FinTech impacts on various industries. It has been designed to integrate academic study and management practice in a way which will form a significant part of an individual's business career.

On completion of the programme, students will be able to advance their knowledge, skills and intellectual abilities as defined in the broad learning outcomes which are underpinned by specific learning objectives below:

i. General Business Knowledge

Learning Objective: acquire a solid understanding of the impacts of digital transformation and technological innovations on the business world today with ethical implications.

ii. Specialist Knowledge

Learning Objective: acquire an in-depth knowledge of digital technologies in the financial industry.

iii. Applied Research

Learning Objective: acquire the ability to conduct original applied research in tech-related business areas.

Mode and Duration

PolyU DFinTech is a part-time, credit-based programme. Students are required to complete 51 credits including 8 taught subjects (a total of 24 credits), 2 compulsory DFinTech Residentials (1 credit for DFinTech Residential 1 and 2 credits for DFinTech Residential 2), and a DFinTech Thesis (8 credits for DFinTech Thesis I and 16 credits for DFinTech Thesis II).

The normal duration is 3 years. Students who wish to extend their studies beyond normal duration should submit an application (i.e. Form AR9) via eStudent to the Research and Postgraduate Studies Section of the Faculty for consideration.

There is a possible exit award of Master of Science in Management Research Studies for students who have completed the 8 taught subjects, 2 compulsory DFinTech Residentials, and passed DFinTech Thesis I (thesis proposal presentation) (a total of 35 credits).

Content

This programme consists of 8 taught subjects (1 compulsory, 1 core and 6 elective subjects), 2 compulsory DFinTech Residentials, and a DFinTech Thesis.

All taught subjects (3 credits each) are at an advanced level and students are assumed to have prior knowledge of each subject area. The normal duration for the DFinTech Thesis is 18 months. The 2 DFinTech Residentials are offered when the programme commences and the DFinTech Thesis phase starts respectively.

Compulsory Subject provides students with a solid foundation in research skills.

Research and Design for Thesis

Core Subjects provide students with an in-depth evaluation of qualitative and quantitative research approaches and methods as well as statistical applications. Students are required to complete any one of the following:

- Introduction to Quantitative Research
- Introduction to Qualitative Research

Elective Subjects allow students to pursue particular areas of interest. There is generally more emphasis on academic readings to prepare students for the DFinTech Thesis. Students are required to complete any six of the following:

Taught Subjects

- Economics of FinTech
- Big Data Analytics and Artificial Intelligence
- · Cryptography and Blockchain
- Digital Supply Chain Management
- Smart City and Urban Informatics
- . Management and Marketing in the Digital World

Non-Taught Subjects

- Independent Studies in FinTech
- Overseas Executive Programmes

Remarks

- 1. Independent Studies in FinTech is only offered to students who are unable to follow the normal pattern of study of this programme due to exceptional circumstances such as illness or posting to work outside Hong Kong. They can enrol in this subject in a specified semester.
- 2. Subject to factors such as staff availability, student enrolment, programme resources and so on, not all subjects will be offered. And, registration is subject to the availability of quota.
- 3. Programme structure and the subject details (e.g. subject description form, offering pattern, class timetable etc.) are subject to review and change from time to time.

DFinTech Residentials

Attendance at the 2 DFinTech Residentials is compulsory.

DFinTech Residential 1 is an orientation workshop scheduled for the beginning of the programme.

DFinTech Residential 2 is a research workshop normally held in September/October to give students an opportunity to present their thesis proposals and to prepare them for writing the theses.

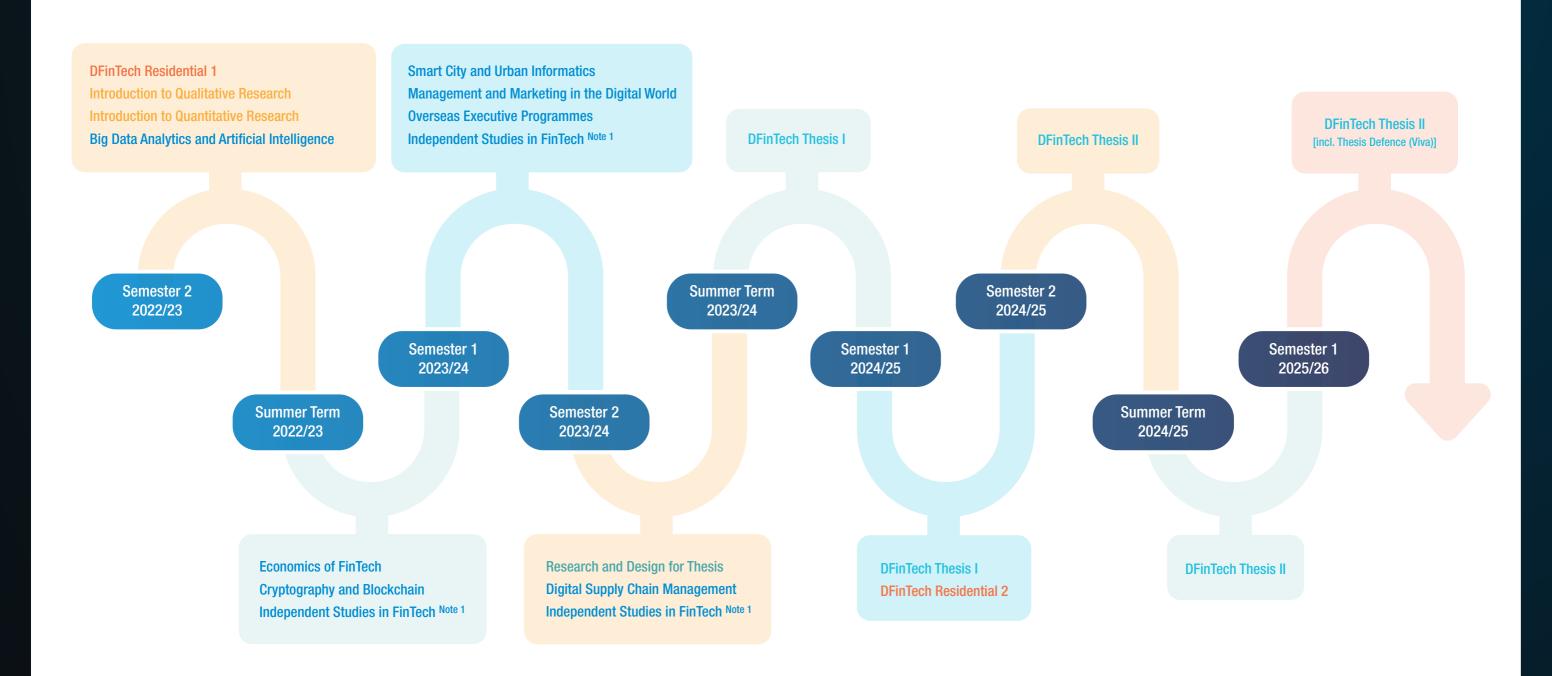
DFinTech Thesis I and DFinTech Thesis II

Students must pass the compulsory subject, 1 core subject and at least 4 elective subjects before beginning their theses. They integrate and apply what they have learned to critically and rigorously examine topics of interest in the field of FinTech. They are challenged to make an important contribution and/or provide innovative insights into the practice of management.

THREE-YEAR **STUDY TIMELINE**

1 Compulsory Subject + 1 Core Subject (choose 1 out of 2) + 6 Elective Subjects (any 6 subjects) + 2 DFinTech Residentials + a DFinTech Thesis

For subject details, please refer to the DFinTech website (www.polyu.edu.hk/fb/study/tpg-landing/tpg/dfintech/programme/#structure) for updates.



Note 1.

Independent Studies in FinTech is only offered to students who are unable to follow the normal pattern of study of this programme due to exceptional circumstances such as illness or posting to work outside Hong Kong. They can enrol in this subject in a particular semester.

Note 2

All subject details (e.g. subject description form, offering pattern, class timetable etc.) are subject to continuous review and change from time to time. Subject to factors such as staff availability, student enrolment, programme resources and so on, not all subjects will be offered. And, registration is subject to the availability of quota.

STUDENTREFLECTIONS

"

The DFinTech programme is inspiring in every aspect and arouses enthusiasm in each lecture. The professors are subject matter experts in their fields and the interactive questions motivate learning. There is exceptional knowledge sharing among classmates from diverse backgrounds and professions. The conclusive research thesis highlights the integration of academic knowledge into innovative business practices.

TO Kai Man, Clarence EMBA, B.Comp Sci, B. Bus.Admin Senior Asia Pacific Risk Program Manager HSBC





"

The DFinTech programme equips me with a multi-disciplinary mindset of approaching problems from different perspectives. I learn not only how to use digital technologies and other cutting-edge technologies relating to artificial intelligence, big data, blockchain, digital supply chain management, smart cities technologies, digital marketing etc., but also how to integrate knowledge with my business practices to enhance strategic management and leadership.

WONG Man Wa, Raymond LLB., PCLL, MSc(Real Estate)(distinction), solicitor Senior General Manager, Sales Department Henderson Land Development Company Limited

ADMISSION

Entrance Requirements

- · A Master's degree, preferably in a business-related area; and
- Substantial managerial experience (at least 5 years) at a senior management level; or
- Candidates in senior management positions possessing a recognized first degree and membership of a recognized professional body may also be considered on a case-by-case basis

If you are not a native speaker of English, and your Master's degree or equivalent qualification is awarded by institutions where the medium of instruction is not English, you are expected to fulfil the University's minimum English language requirement for admission purpose. Please refer to the "Admissions Requirements" section for Taught Postgraduate Programmes at Study@PolyU for details.

Candidates are required to submit the following documents at the time of application:

- A proposal in the FinTech area (1,200 -2,000 words)
- Proof of employment (at least 5 years)
- Your academic qualifications (such as graduation certificates, transcripts of studies, etc.) that are not in English should be accompanied by an official certified English-translation

Provision of additional documents may be required if deemed necessary.

An incomplete application cannot be processed promptly and will reduce your chance of admission. Please complete all relevant fields on the application form and enclose all necessary documents.

Shortlisted candidates will be invited for interviews.

Fees and Payment Schedule

Fee for the entire programme for 2022/23 intake: HK\$851,700 (51 credits)

Fee for 8 taught subjects

Fee for DFinTech Thesis I and II

Fee for 2 DFinTech Residentials

HK\$400,800 (24 credits)

HK\$400,800 (24 credits)

HK\$50,100 (1 credit for DFinTech Residential 1 and 2 credits for DFinTech Residential 2)

Initial Payment

Fees for 1 taught subject (HK\$50,100) and DFinTech Residential 1 (HK\$16,700) are payable upon acceptance of offer.

Interim Payments

Fees for the remaining taught subjects are payable on a credit basis (HK\$16,700 per credit). Amount payable depends on the number of subjects taken in that semester.

Fees for the 8-credit DFinTech Thesis I (HK\$133,600) and DFinTech Residential 2 (HK\$33,400) are payable upon the registration for DFinTech Thesis I.

Final Payment

Fee for the 16-credit DFinTech Thesis II (HK\$267,200) is payable upon registration for DFinTech Thesis II.

ENQUIRIES

For academic matters

Prof. Wilson Tong
Programme Director

- (i) (852) 2766 4399

For other information

- (1) (852) 3400 3234 / (852) 2766 7889
- **(852) 2365 7415**
- www.polyu.edu.hk/fb/study/tpg-landing/tpg/dfintech

Online application: www.polyu.edu.hk/admission

The content of this publication is updated until February 2022.



