THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Department of Computing
電子計算學系

MASTER OF SCIENCE IN

BLOCKCHAIN TECHNOLOGY

區塊鏈科技理學碩士課程

TOP MSC PROGRAMME THAT
DECRYPTS AND CONNECTS BLOCKS OF KNOWLEDGE

About US

About PolyU

With over 89 years of proud tradition and ranking among the world's top 100 institutions, PolyU strives in interdisciplinary research and impactful innovations to address real-world challenges.

About COMP

The Department of Computing (COMP) is one of the pioneers offering computing education in the territory. Since 1974, COMP has been devoted to nurturing professional talents to support the advancement of society.

International Recognition

Today, COMP has gained international recognition in world-class research and high-quality education and ranked among the top 100 in a number of world rankings. In the latest world university rankings by the subject "Computer Science" :

23rd U.S. News & World Report 2026

32nd Global Ranking of Academic Subject 2025

70th The Times Higher Education World University Rankings 2026

Advanced learning facilities & laboratories

COMP owns world-class laboratories and the first University Research Facility in Big Data Analytics in Hong Kong, providing solid hardware support for cross-disciplinary research and teaching activities.

- Collaborative Generative AI (Co-GenAI) Research Centre
- FinTech and Cyber Security Lab (FCSL)
- Internet and Mobile Computing Lab (IMCL)
- Research Centre on Data Science and Artificial Intelligence (RC-DSAI)
- The Research Centre for Blockchain Technology (RCBT)
- University Centre for AI Computing (UCAIC)

Students undertaking projects and dissertations will have the opportunity to access other resources such as the Game Lab and the Big Data and Cloud Computing Platform.

Game Lab

Research Centre on Data Science and Artificial Intelligence (RC-DSAI)

Excellent platform for peer learning & exchange

Our MSc programmes offer a well-resourced environment of broad student mix, students can benefit from interaction with their peers in exchanging ideas and sharing experiences. COMP also maintains an extensive network of MSc alumni, students can acquire both advanced expertise and professional networks that help them scale new heights in their careers.

MSc in **Blockchain Technology**

Programme Introduction

The Master of Science in Blockchain Technology (MScBT) programme is the first blockchain master's programme in Hong Kong. It emphasises the fundamental and latest technology supporting Fintech infrastructure and applications, especially the full-stack blockchain technology.

Designed for professionals proficient in blockchain and related technologies, the programme equips students to analyse, design, implement, and evaluate Fintech and other related systems, products, and services. Key Fintech technologies and applications, as well as other aspects such as security, compliance and regulation, are covered. The programme also provides the knowledge, support, and guidance needed to pursue lifelong learning and professional development in Fintech and related disciplines.

Ranking

CoinDesk's Best University for Blockchain in 2022

Features

PROGRAMME SUITS STUDENTS FROM DIVERSE DISCIPLINES

Serves as a bridging programme for those who may either have some or no previous academic computing experience. The programme is also suited for computer science and IT graduates who would polish up their knowledge and professionalism in blockchain and related technologies.

ALL ABOUT BLOCKCHAIN TECHNOLOGY

Covers full-stack blockchain techniques with a range of subjects on the fundamental principle, design, development, security and compliance of blockchain and its applications for - fintech and other strategic areas (e.g., logistic, smart city, government)..

KEEP ABREAST OF THE STATE OF THE ART IN BLOCKCHAIN RESEARCH

The Research Centre for Blockchain Technology (RCBT) of PolyU coordinates researchers working on blockchain in the University to tackle fundamental problems in blockchain, to develop innovative blockchain-based applications in strategic areas, to nurture blockchain talents, and to establish alliance among academic and industry partners. Numerous opportunities are offered to our MSc students to participant in R&D projects with faculty members and external collaborators.

EXTENSIVE INDUSTRIAL NETWORK

COMP has been closely bound up with multiple industrial partners in order to cultivate blockchain-savvy talents. Our MSc students would have the opportunities to meet and learn from experienced practitioners from the industry, and connect with industry experts and innovators to extend their network in the field.

SCHOLARSHIP AVAILABLE

With the donation from BlockSec Innovation (HK) Limited (https://blocksec.com/), a leading blockchain security service provider, a scholarship scheme has been set up for this programme exclusively. A total of HKD$80,000 scholarship will be offered to our outstanding MScBT students annually. The scholarship targets to recognise outstanding students who have excellent learning performance in the field of blockchain security. Students who have finished the designated core subject, Blockchain and Smart Contract Security, are eligible to apply for the scholarship.

Programme Structure

MSc in Blockchain Technology

Each subject takes place once a week in the evening over a 13-week semester. Full-time students normally take 5 subjects in a semester, whereas part-time students usually take 2 or 3 subjects.

Awards	MScBT
With Dissertation	6 Cores + 1 Elective* + 1 AIE Subject + 1 Dissertation
With Project	6 Cores + 2 Electives* + 1 AIE Subject + 1 Project
Without Dissertation/ Project	6 Cores + 4 Electives* 1 AIE Subject
Credits requirements	31

*Any 6 out of 8 core subjects should be chosen and students are allowed to take additional Core subjects to fulfil the Elective requirement.

MODE OF STUDY

This is a mixed-mode programme that students may pursue their studies either in full-time or part time mode.

AWARD REQUIREMENT

Students are required to complete 31 credits for the MSc in BT.

Subject Introduction

Core Subjects

- Distributed Ledger Technology, Cryptocurrency & E-Payment
- Distributed Algorithms and Protocols for Blockchains
- Decentralized Apps Fundamentals and Development
- Decentralized Finance
- Blockchain and Smart Contract Security
- Applied Cryptography for Financial Applications
- Machine Learning and Applications in Finance
- Fintech Regulation and Compliance

Academic Integrity and Ethics Subject

- Academic Integrity and Ethics in Computer and Mathematical Sciences (1 credit)

Elective Subjects

- Economics for Financial Analysis
- Quantitative Methods for Finance
- Financial Analysis and Valuation
- Derivatives Securities
- Accounting for Business Analysis
- Principles of Corporate Finance
- Investments
- Data Structures and Database Systems
- Advanced Data Analytics
- Software Project Management
- Software Engineering and Development
- Internet Infrastructure and Protocols
- Cyber and Internet Security
- Natural Language Processing
- Big Data Computing
- Artificial Intelligence Concepts
- Computer Vision and Image Processing
- Machine Learning and Data Analytics
- Optimization and Applications
- Computational Economics and Algorithms
- Modern Cryptography
- AI Security
- IOT Security: Principles, Protocols, and Practice
- Agentic Computing, Systems, and Applications
- Large Language Models for Agents
- Project (6 credits)
- Dissertation (9 credits)

Students are required to study 6 core subjects, which covers various aspects of the blockchain technology, including cryptocurrency, consensus algorithms and protocols, decentralized application development, security, regulation and compliance.

Students are allowed to choose from a common pool of electives, subject to vacancies available. Subjects such as Dissertation and Project have different assessment requirements and require supervision arrangement.

All subjects bear three credits unless otherwise stated and they are subject to review and changes.

Admission Requirements

- A Bachelor's degree in Computing/Computer Science/Engineering, Information Systems, Mathematics or other related disciplines. Applicants with a Bachelor's degree in other disciplines with at least three years of relevant work experience in IT will also be considered.

- If you are not a native speaker of English, and your Bachelor's degree or equivalent qualification is awarded by institutions where the medium of instruction is not English, you are expected to provide one of the following proficiency test results (taken in a single sitting within 2 years) to fulfil the minimum English language requirement for admission purpose:

a) An overall score of 80 out of 120 / 4.5 out of 6 (For tests taken on or after 21 Jan 2026) or above in the Test of English as a Foreign Language (TOEFL) Internet-based test; OR

b) An Overall Band score of 6.0 or above in the International English Language Testing System (IELTS) Academic module.

More information can be found at www.polyu.edu.hk/study.

Application

To apply for the programme, applicants can submit their application via an online admission system at www.polyu.edu.hk/admission. This programme has a quota for admission therefore early application is strongly encouraged.

Programme Code	**61036**
Tuition Fee (30 credit)	**HK$ 14,500 per credit for local and non-local students**

Scholarship

All full-time students in this programme who finished the designated Core Subject, **Blockchain and Smart Contract Security**, are eligible to apply for the "BlockSec Blockchain Security Award". Up to ten awardees would be selected according to their academic performance, leadership and the quality of the final project.

Department of Computing

PolyU COMP

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Contents of this publication are subject to review and change.
Please refer to www.polyu.edu.hk/comp/ for the latest information. (July 2026)