THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Department of Computing
電子計算學系

2026/27

JUPAS Code: JS3868

Bachelor of Science (Honours)

Scheme in COMPUTING and AI

電子計算及人工智能 (榮譽) 理學士組合課程

SHAPING AND TRANSFORMING
THE FUTURE WITH COMPUTING

Department Ranking

25th
U.S. News & World Report 2025 in Computer Science

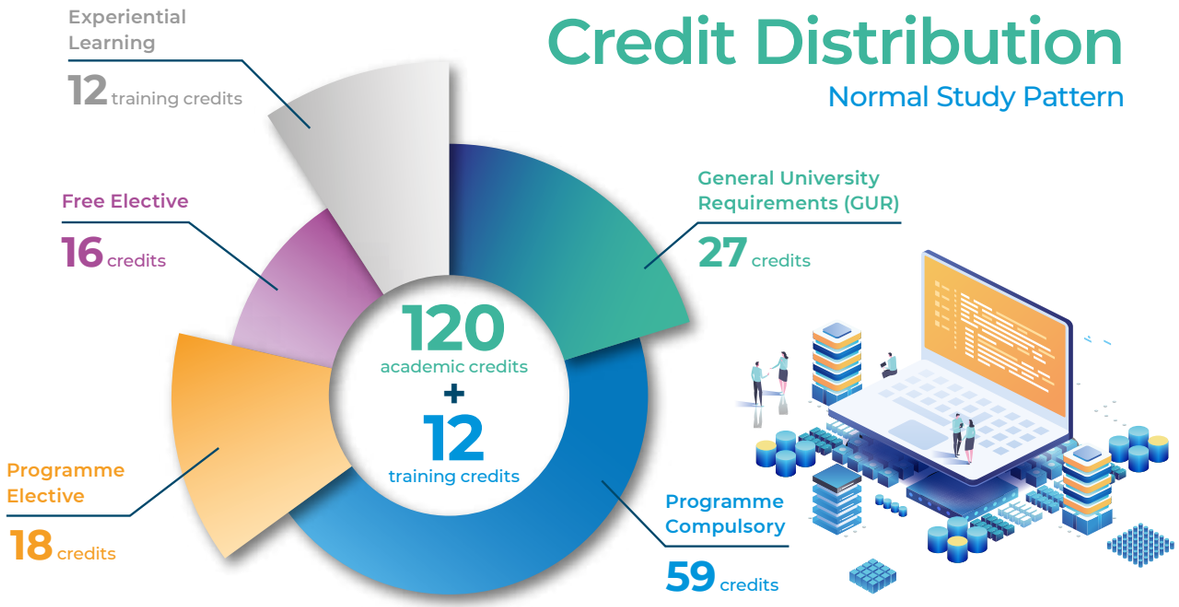
40th
SHANGHAI RANKING
Global Ranking of Academic Subject 2024 in Computer Science & Engineering

74th
THE World University Rankings 2025
The Times Higher Education World University Rankings 2025 in Computer Science

76th
QS WORLD UNIVERSITY RANKINGS
QS World University Subject Rankings 2025 in Computer Science & Information Systems

Credit Distribution

Normal Study Pattern



Fast Track Integrated Bachelor's and Master's Programme

4 years — BSc Scheme (Hons) in Computing and AI

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1 year — MSc in Information Technology (MScIT)

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Graduation with **9** Credits LESS in MScIT (= Save HK$74,700*)

* The tuition fee of the MSc in Information Technology for admission in year 2026/27 is HK$8,300 per credit for local and non-local students. The tuition fee is subject to change without notice.

Features

Applied and Practical
Covers Up-To-Date Practical Skills

Rich Study Pathways
Minor Study and Specification Stream

Experiential Learning
Career Preparation + Non-Local Learning Experience

Professional Development
Training and Certification Programmes

Computing for Everyone
Students with Backgrounds in Arts, Science or Business are welcome to apply

Scheme Structure

Experiential Learning
Work Experience & Non-Local Learning Experience

Year 1 — Common Fundamental Year
Same curriculum for all programmes in the first year

Year 2 — Broadening Year
Choose major study in the second year

Year 3 — Strengthening Year

Final Year — Specialisation Year

Award

Normal Duration: 4 years

BSc (Hons) in **Computer Science**

BSc (Hons) in **Enterprise Information Systems**

Articulation to Postgraduate Programmes

- MPhil / PhD in Computing
- MSc in Information Technology
  Blockchain Technology
  Metaverse Technology

Bachelor of Science (Hons) in

Computer Science

Features a rich set of Electives that cover real-life applications, such as ***Data Mining, Multimedia and Game Programming, E-Commerce, Financial and Social Computing.***

Programme Aims

Aims to equip graduates with solid computing foundations in areas such as **programming, computational thinking, data structure** and **algorithms** which will allow them to develop professional computer systems and software. Students develop strong problem-solving abilities and become highly competent in software development for virtually all sectors.

"After obtaining my bachelor degree from PolyU, I pursued an MPhil degree at the University of Cambridge. I am currently continuing my PhD studies at Cambridge, focusing on Artificial Intelligence and Large Language Models. My studies at COMP provided me with a solid foundation in computer science through various courses and research opportunities, which sparked my interest in language processing and cognitive science."

ZHANG Caiqi *(Class of 2022)*

Career Prospects

Programmers

System Developer

Data Scientist

Game Developer

System Analyst

Software Engineer

Curriculum

Year of Study	Key Objective	Core Subject Highlight
Year 1 (Common Fundamental Year)	Build fundamental knowledge in computing and analytics	• Computational Thinking and Problem Solving • Programming Fundamentals
Year 2 (Broadening Year)	Explore core computer science disciplines	• Data Structures • Discrete Mathematics • Object-oriented Programming • Database Systems • Computer Networking • Computer Organization • Operating Systems
Year 3 (Strengthening Year)	Deepen technical expertise and design thinking	• Software Engineering • Human-Computer Interaction • System Programming • Computer Systems Security • Legal Aspects and Ethics of Computing
Year 4 (Specialisation Year)	Apply knowledge through Capstone Project	• Capstone Project

Stream

Depending on your own interests and career plans, students can select elective subjects in the streams and obtain a certificate of recognition from COMP upon fulfilling the subject requirements.

Elective Subject Highlight:

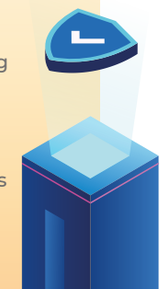
- Computer Vision
- Artificial Intelligence
- Machine Learning
- Data Mining and Data Warehousing
- Big Data Analytics
- Artificial Intelligence of Things
- Business Intelligence and Customer Relationship Management
- Knowledge and Information Management
- Data Protection and Security

Elective Subject Highlight:

- Database Security
- Internetworking Protocol, Software and Management
- Principles and Practice of Internet Security
- Service and Cloud Computing
- Web Application Design and Development
- Mobile Computing
- Artificial Intelligence of Things

Elective Subject Highlight:

- Design and Analysis of Algorithms
- Theory of Computation
- Computational Methods
- Numerical Methods and Computing
- Simulation
- Algorithms Engineering
- Machine Learning
- Big Data Analytics
- Optimization Methods
- Number, Combinatorics and Statistics



Bachelor of Science (Hons) in

Enterprise Information Systems

*A balanced curriculum that covers **technology, management and business and emphasises computing techniques and applications, and software design and development skills** in the business sector.*

Programme Aims

Aims to provide graduates with a good foundation in both business and technical skills. Graduates are competent in **investigating business systems, identifying options for improving those systems** and **bridging the needs of business with the use of IT**. They also have the ability to develop information systems and manage business projects in the commercial sector.

> "I opted for PolyU COMP because of its curriculum's alignment with industry trends and emphasis on real-world applications. In the first year, students start with theoretical foundational courses and have the opportunity to explore different interests before choosing specialisations."
>
> **Leandra Leung** *(Class of 2025)*

Career Prospects

- Business Analyst
- Project Manager
- Information Systems Manager
- Management Executive

Curriculum

Year of Study	Key Objective	Core Subject Highlight
Year 1 (Common Fundamental Year)	Build fundamental knowledge in computing and analytics	• Computational Thinking and Problem Solving • Programming Fundamentals
Year 2 (Broadening Year)	Explore computing and business fundamentals	• Data Structures • Object-oriented Programming • E-business • Database Systems • Computer Networking • Management and Organization
Year 3 (Strengthening Year)	Develop advanced technical and managerial skills	• Business Intelligence and Customer Relationship Management • Software Engineering • Human-Computer Interaction • Software Project Management • Legal Aspects and Ethics of Computing
Year 4 (Specialisation Year)	Apply knowledge through Capstone Project	• Capstone Project

Stream

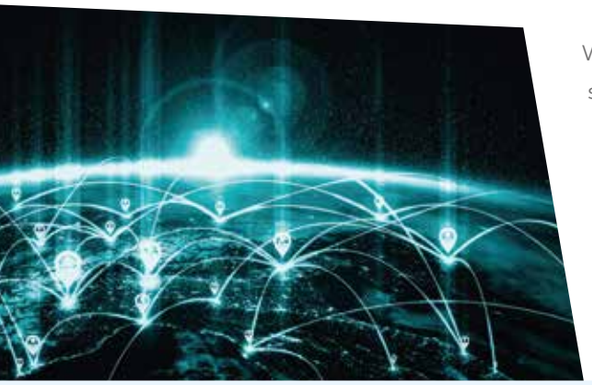
Depending on your own interests and career plans, students can select elective subjects in the streams and obtain a certificate of recognition from COMP upon fulfilling the subject requirements.

Stream of Data Analytics

Elective Subject Highlight:

- Information Retrieval
- Knowledge and Information Management
- Data Mining and Data Warehousing
- Big Data Analytics
- Social and Collaborative Computing
- Operations Research and Logistics Management
- Computational Finance
- Protection and Security
- E-Payment and Cryptocurrency

Experiential Learning



We promote all-round development by encouraging students to apply classroom knowledge in real-world settings. Through **Work Experience** and **Non-Local Learning Experience**, students gain hands-on experience and global exposure, connecting with industry professionals and diverse cultures.

Options

01 6-Month Internship and International Learning Opportunities

02 Work-Integrated Education and Outbound Exchange

Career Preparation

6-Month Internship Programme / Work-Integrated Education (WIE)

Our students gain practical experience at leading organisations such as HKMA, HA, HSBC, IBM, Microsoft, and ASTRI. Many also participate in overseas internships in countries like the US, Canada, France, Germany, Japan, and Singapore, enhancing their cross-cultural and professional competencies.

My time as an Analyst at HSBC's transformation team taught me how the world of technology enables processes within a banking institution. Working my way up from small projects, while attending classes at university in the evening, I learnt to zoom in and out of contexts, developing and brainstorming solutions with stakeholders from vastly different backgrounds, united by our passion to make the journey for every customer exciting, personalised and accessible.

SREEKUMAR Sidharth, *BSc (Hons) in Computer Science*

Non-local Learning Experience

Outbound exchange / International learning

Our students spend between two and six months at different universities to experience new cultures, expand vision, make new friends from around the world and develop social skills that are beneficial to their future career success. We also provide a broad range of activities, including international competitions, summer research abroad, study tours, and overseas service-learning.

Participating in an enriching exchange programme in Germany during my second year has sharpened my adaptability and intercultural communication skills, bolstering my future career prospects.

Leandra Leung

(Class of 2025) – BSc (Hons) in Enterprise Information Systems

There are also a lot of opportunities for learning beyond the classroom, I will be leaving for a service learning project in Rwanda with my academic advisor where we will be installing solar panels with the local youth.

EREN Arda

BSc (Hons) in Computer Science

Student Development

We empower students to grow beyond the classroom through diverse enrichment opportunities.

Competition

Students with a passion for tech competitions receive support in training, equipment, and funding. They also have the chance to gain hands-on experience by contributing to the competition organisation.

▲ 2024 ICPC Asia East Continent Hong Kong Regional Contest

▲ Global Game Jam

Training and Certification Programme

In collaboration with industry partners, we offer professional training and certification programmes that enhance practical skills and boost

▲ Nvidia “Fundamentals of Deep Learning” Certificate Training Programme

Workshops and Seminars

We regularly organise workshops and seminars that feature tech trends, career planning and society issues—broadening students’ perspectives beyond the curriculum.

▲ CV writing workshop

▲ Tech Talks by World-class Distinguished Speakers

▲ Open Forum: “AI and Fintech Applications for Banking, Finance and Servicing Industry”

Learning Resources and Support

We provide comprehensive facilities and guidance to support academic success.

IT Facilities

Computer Labs with 130 High-Performance Workstations

Printing Facilities for COMP Students

Project Lab for Group Discussion and Collaborative Work

High-Performance Computing (Apulis AI Studio / NVIDIA DGX A800)

Academic Advising

Each full-time student is paired with a designated academic advisor for personalised guidance throughout their studies.

Scholarships

Students with outstanding achievements in academic and/ or non-academic pursuits are offered a wide range of scholarships by PolyU and COMP.

▲ Au Bak Ling Charity Trust Scholarship

▲ InfoTech Job Market Driven Scholarship

Entrance Requirements

We accept students from all backgrounds - arts, science, or business. Our Scheme in Computing and AI has the same entrance requirements as other programmes in PolyU. They are:

For Entry with HKDSE Qualifications

Four core subjects and two elective subjects with:

Level 3 English Language	Level 3 Chinese Language	Level 2 Mathematics
Level 3 Elective^	Level 3 Elective^	Attained Citizenship and Social Development

^ M1/ M2 are also considered as electives

Preferred subjects include English, Mathematics, Extended Modules of Mathematics (M1/ M2), Information and Communication Technology (ICT), Physics/ Biology/ Chemistry , Business, Accounting and Financial Studies (BAFS), and Economics.

Apply via JUPAS
(Joint University Programmes Admissions System)

http://www.jupas.edu.hk

Alternative Entry Route

All applicants must fulfil the General Entrance Requirement and English Language Requirement to be considered for admission.

A-Level qualifications:

Pass in 3 A-Level subjects
Applicants who gain admission, typically, attain at least 3B in 3 AL subjects.

International Baccalaureate (IB)#:

IB Diploma
Successful applicants typically achieved an International Baccalaureate (IB) score of 32 or higher out of 45 in recent years. Candidates with a predicted IB score of 30 or above may be considered for an admission interview.

Other qualifications:

a) An appropriate Diploma passed with credit or an appropriate Higher Certificate from a recognised institution; OR

b) An appropriate Associate Degree / Higher Diploma from a recognised institution*; OR

c) Holder of other non-local qualifications (please refer to PolyU's Guidelines on Non-local Qualifications for more details about our general requirements for such qualifications)

Applicants who gain admission, typically, attain a GPA between 3.2 and 3.7.

** Applicants with Associate Degree / Higher Diploma from recognised institutions applying for 1st year entry may be granted credit transfer at a maximum of 25% of the credit requirement of a 4-year full-time undergraduate degree scheme / programme. For those who would like to seek senior year admission to PolyU's degree programmes and follow a reduced curriculum of 60 to 70 credits, please refer to PolyU's undergraduate admissions webpage for more details.*
 # Applicants with A-Level / IB qualifications, or the equivalent, may be granted a maximum of 25% credit transfer for the award requirement. Each case will be considered based on individual merits.

Apply via Non-JUPAS

www.polyu.edu.hk/study

Contact

comp.ug@polyu.edu.hk

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Content of this publication is subject to review and change. (September 2025)