



Bachelor of Science  
(Honours) in Information and  
Communications Technology  
資訊與通訊科技(榮譽)理學士

YEAR 1 ENTRY  
SELF-FINANCED DS125109

YEAR 3 ENTRY  
SELF-FINANCED DS125109

## PROGRAMME HIGHLIGHTS

- Integrate conceptual and technological knowledge with practices for data analytics, software engineering, cloud computing and cybersecurity
- Cover cutting-edge and prevalent technologies including Machine Learning, Data Science, Cloud Computing, Cybersecurity, Internet of Things, Mobile App Development, Full Stack Development and Game Development
- Enhance students' abilities and competence to meet the needs of the latest-growing information and communications technology industry in Hong Kong

### Programme Overview

This programme aims to provide students with the conceptual and technological knowledge for data analytics and software engineering as well as network and system configuration. Emphasis is on integration of theoretical knowledge with practical skills on implementing applications. Graduates will be able to apply proven principles and techniques to the development and support of computer systems. A distinguished feature of the programme is that it will enhance students' abilities and competence to meet the needs of the fast-growing information and communications technology industry in Hong Kong.

### Career Prospects

Graduates will be employed as Software Developers, Network Engineers, Data Analysts, AI Engineers, Security Engineers, Game Software Developers, Mobile and Web Application Programmers, rising to challenging prospects such as ICT Project Managers, Data Scientists, Security Consultants/Managers, Game Software Technical Officers, Internetworking Administrators and other managerial positions.



### Graduate Endorsement

"After joined ICT programme, I found the knowledge delivered are closely related to the needs of industry. It empowers me in facing the challenges ahead."

### LEUNG Ka Shing

2019 Graduate

## PROGRAMME STRUCTURE

### YEAR 1

- General Education Core Module: Chinese 1
- General Education Core Module: Creativity & Innovation in Society
- General Education Core Module: English for Academic Studies 1
- IT Essentials
- Introduction to Programming
- Network Fundamentals
- Discrete Mathematics, Probability & Statistics
- Database Principles
- Object-Oriented Programming
- Multimedia Websites Design & Practices
- Applied Mathematics for Science &

### YEAR 2

- General Education Core Module: Technology, Society & Work
- General Education Core Module: Entrepreneurial Mindset
- Operating Systems & Architecture
- Web Applications Development
- Software Engineering & Project Management
- Object-Oriented System Analysis & Design
- Data Structures & Algorithms
- IT Professionalism
- Software Development Project
- General Education Elective Module 1
- General Education Elective Module 2

### YEAR 3

- Mobile Applications Development
- Game Engines & Game Development
- Advanced Database Systems
- Network Switching & Routing
- Cloud Computing
- Enterprise Architecture & System Development
- Work-integrated Learning
- General Education Core Module: Chinese 2
- General Education Core Module: English for Academic Studies 2
- General Education Core Module: English for Professional Purposes
- General Education Elective Module 3
- Program Elective Module 1

### YEAR 4

- Cybersecurity Operations
- Machine Learning
- Data Science
- Modern Web Technology & Development
- Enterprise Network Technologies
- Advanced Topics in ICT
- Program Elective Module 2
- Program Elective Module 3
- Final Year Project 1
- Final Year Project 2
- General Education Elective Module 4

## PROGRAMME ELECTIVES\*

- Distributed Systems & Computing
- Embedded Systems & Hardware Interface
- Object-Oriented Framework & Design Patterns
- Game Software Technology & Development
- Data Visualisation & Interface Design
- Artificial Intelligence & Expert Systems in Games
- 2D/3D Graphics Programming
- Big Data & Enterprise Search Engines

## GENERAL EDUCATION ELECTIVE MODULES\*

### Faculty of Design and Environment (FDE)

- Asian Fashion Retail Marketing
- Effective Branding & Consumer Behaviour
- Housing Policy & Management
- Impact of Contemporary Design on Society
- Living with Sustainable Materials
- The Art & Science of Film
- Toy Design
- Landscape Appreciation
- Urban Greenery & Ecology
- Land Art
- Digital 3D Modelling & Printing for Beginners

### Faculty of Management and Hospitality (FMH)

- Stress Management
- Wellness & Lifestyle Management
- Corporate Social Responsibility in Action
- Personal Financial Management
- Self-marketing & Personal Branding
- The Tourism Industry in Hong Kong
- Marketing Essentials
- Accounting for Non-Accountants
- Business Management in Hong Kong
- Essentials in People Management
- Introduction to Japanese Language & Culture
- FinTech Fundamentals
- Introduction to Japanese Language & Culture
- FinTech Fundamentals
- The Art of Professional Speaking
- Holistic Massage Therapy
- Guangdong Dim Sum Culinary Skills & Culture

### Faculty of Science and Technology (FST)

- Environment, Development & Sustainability
- Green & Intelligent Building
- Nutrition & Health
- Food in Daily Life
- Safety & Quality of Consumer Products
- Renewable Energy & Its Application in Buildings
- Buildings & Infrastructures Appreciation
- Health & Medical Technology Development in Guangdong-Hong Kong-Macao Greater Bay Area
- Environmental, Health & Safety Implementation of Commercial & Industrial Project
- Project Organisation Techniques
- Traditional & New Construction Technologies in Mainland China
- Food & Agriculture
- Introduction to Concepts of New Engineering Contracts
- Principles of Project Finance
- Basics of Building Information Modelling
- Introduction to Aircraft Technology

## SCHOOL OF GENERAL EDUCATION AND LANGUAGES (SGEL)

- Hong Kong Society: Continuity & Change
- Literature & Modern China
- The Modern World: History & Culture
- Language, Culture & Society
- Translation in Everyday Life (English-Chinese)
- Journey to the Exotic World of Microorganisms
- Plants & Human Civilisations
- Creative Writing in Chinese
- Introduction to Spanish Language & Culture
- Service Leadership in a New Era
- Making Sense of Our World: Selected Topics in Sociology
- Cantonese Linguistics in Hong Kong Popular Culture
- Western Classical Music Appreciation
- Hong Kong Literature: the Local, the Mainland & the World
- Biographies in World History & Biographical Writing in Chinese
- Introduction to French Language & Culture
- Music Technology, Creativity & Production
- Understanding Citizenship in the Modern World
- Chinese as a Foreign Language & Culture
- Introduction to Interpreting Skills (Cantonese-English)
- Understanding Hong Kong History & Culture through Heritage