

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

Year  
**1**  
Entry

SSSDP JUPAS  
Catalogue No.  
JSSV12

Year  
**3**  
Entry

Self-financed  
DS125109



### PROGRAMME HIGHLIGHTS

- Integrate conceptual and technological knowledge with practices for software and network development
- Comprise contemporary mobile and internet technology and development of game software
- Prepare graduates for entering the dynamic creative industry in multimedia design and digital entertainment

### Programme Overview

This programme aims to provide students with the conceptual and technological knowledge for software and network development. Emphasis on integration of theoretical knowledge with practical skills on implementing applications using Game Software Technologies. Graduates will be able to apply proven principles and techniques to the development and support of computer systems.

A distinguishing feature of the programme is that it will enhance students' ability and competence to meet the needs of the fast-growing information and communications technology industry in Hong Kong. In particular, the programme covers the following latest IT technologies:

- Mobile and Modern Web Technologies
- Enterprise Architecture and System Development
- Game Engines and Game Development
- Game Software Technology and Development
- Network Virtualisation and Cloud Computing
- Big Data and Enterprise Search Engines
- Systems and Network Security

### Career Outcome

Graduates will be employed as Software Developers, Network Engineers, Game Software Developers, Mobile and Web Application Programmers, rising to challenging prospects such as Project Managers, Game Software Technical Officers, Internetworking Administrators and other managerial positions.



資歷架構  
Qualifications  
Framework

This programme is recognised under the QF (Level 5)  
QR Registration No. : 16/000214/L5  
Registration Validity Period: 01/09/2016-31/08/2021

## Programme Structure

### Year 1

- General Education Core Module: Chinese 1
- General Education Core Module: The Human Spirit
- 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 & Technology

### Year 2

- General Education Core Module: Habits of Scientific Thinking
- General Education Core Module: Social Dynamics of Organisations
- Operating Systems & Architecture
- Web Applications Development
- Software Engineering & Project Management
- Object-Oriented System Analysis & Design
- Data Structures & Algorithms
- ICT Professionalism
- Software Development Project
- General Education Elective Module 1
- General Education Elective Module 2

### Year 3

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

### Year 4

- Systems and Network Security
- Object-Oriented Framework and Design Patterns
- Game Software Technology and Development
- Modern Web Technology and Development
- Enterprise Network Technologies
- Advanced Topics in ICT
- Program Elective Module 1
- Program Elective Module 2
- Final Year Project 1
- Final Year Project 2
- General Education Elective Module 4

## Programme Electives\*

- Data Visualisation and Interface Design
- Artificial Intelligence and Expert Systems in Games
- 2D/3D Graphics Programming
- Big Data and Enterprise Search Engines

## General Education Elective Modules\*

### Faculty of Design and Environment (FDE)

- Effective Branding & Consumer Behavior
- Impact of Contemporary Design on Society
- Living with Sustainable Materials
- Landscape Appreciation
- Urban Greenery & Ecology
- Tree Safety Inspection & Climbing
- The Art & Science of Film
- Housing Policy & Management

### 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

### Faculty of Science and Technology (FST)

- Environment, Development & Sustainability
- Urban Development in Hong Kong
- Green & Intelligent Building
- Nutrition & Health<sup>^</sup>
- Technological & Economic Development in a Global Context
- Food in Daily Life<sup>^</sup>
- Safety & Quality of Consumer Products
- Introduction to Astronomy
- Renewable Energy & Its Application in Buildings

### 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 in Hong Kong Popular Culture
- Beyond Hollywood: Introduction to World Cinema
- Western Classical Music Appreciation
- Hong Kong Literature: the Local, the Mainland & the World

\* More elective modules may be offered. Modules offered are subject to change.

Students may be required to attend additional training and industrial attachments, for which separate fees will be charged.

Completion of additional core module(s) may be required prior to commencement or during Year 3 study for Year 3 entry.

<sup>^</sup> Students are allowed to either take "Nutrition & Health" or "Food in Daily Life" but not both modules to fulfil the graduation requirements.

<sup>#</sup> Students are allowed to take either "The Art & Science of Film" or "Beyond Hollywood: Introduction to World Cinema" but not both modules to fulfil the graduation requirements.