PROGRAMME CODE

P53

Department of Computer Science

香港城市大學
City University of Hong Kong

MASTER OF SCIENCE IN COMPUTER SCIENCE

- **Rich curriculum:** Many elective courses in high demand and in diverse areas to choose from.
- **Duration:** May graduate within one year full-time.
- **Concentration:** May choose to graduate *without concentration, OR* optionally *with concentration on* one of the three streams: ***artificial intelligence*** (**AI**), ***data science*** (**DS**), or ***information security*** (**IS**).
- **Innovation and Research:** May choose to take *Guided Study* and/or *Project* elective courses for in-depth study of a self-chosen topic in preparation for taking up advanced innovative development work in the industry or further pursuit of higher research studies.

PROGRAMME ENTRANCE REQUIREMENTS

A recognised bachelor's degree in a computing discipline such as

- COMPUTER STUDIES
- INFORMATION TECHNOLOGY
- COMPUTER ENGINEERING
- INFORMATION SYSTEMS

OR

A recognised bachelor's degree in a related discipline such as

- ELECTRONIC ENGINEERING
- APPLIED MATHEMATICS
- MANUFACTURING ENGINEERING
- QUANTITATIVE ANALYSIS

together with applicable working experience in information technology

Early application is strongly encouraged. Applications normally start in mid-November and are processed on a rolling basis. Review of applications will start before the deadline and finish as soon as all places are filled.

For application deadline, tuition fees and other information, refer to the following website.
https://www.cityu.edu.hk/pg/programme/P53

DEPARTMENT OF COMPUTER SCIENCE

TEL (852) 3442 8580
EMAIL mscs@cs.cityu.edu.hk
WEBSITE http://www.cs.cityu.edu.hk

CHOW YEI CHING SCHOOL OF GRADUATE STUDIES

TEL (852) 3442 5588
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WEBSITE http://www.cityu.edu.hk/sgs

MSCS

MASTER OF SCIENCE IN COMPUTER SCIENCE (P53)

DEPARTMENT OF COMPUTER SCIENCE | CITY UNIVERSITY OF HONG KONG

PROGRAMME AIMS

(1) Enable computer professionals to strengthen and upgrade their technical capabilities in computer software development.

(2) Broaden students' knowledge and deepen their understanding of key issues of specific areas in computer science, including artificial intelligence, data science, information security, multimedia, and other related contemporary technologies.

(3) Prepare graduates to take up research and advanced innovative development work in the industry or pursue higher research studies.

CURRICULUM

Each course is worth 3 credit units except CS6520 Project which is worth 6 credit units.

9 credit units from required courses + **x** credit units ($x \geq 3$) Group I electives* + **21-x** credit units from Group II electives* = **30** total credit units TO GRADUATE

ELECTIVES

NO STREAM	**21** credit units from any electives			
OR				
ARTIFICIAL INTELLIGENCE AI STREAM	**3** credit units from AI stream core	**≥9** credit units from AI stream electives	**≤3** credit units (at most 1 course) from each of the other 2 streams	Non-stream course(s)
OR				
DATA SCIENCE DS STREAM	**≥12** credit units from DS stream electives		**≤3** credit units (at most 1 course) from each of the other 2 streams	Non-stream course(s)
OR				
INFORMATION SECURITY IS STREAM	**≥12** credit units from IS stream electives		**≤3** credit units (at most 1 course) from each of the other 2 streams	Non-stream course(s)

*For details of Master of Science in Computer Science (MSCS) curriculum and full list of electives, including Group I and Group II electives, refer to **https://www.cs.cityu.edu.hk/academic/mscs/curriculum/structures.html**

SAMPLE FULL-TIME STUDY PLAN — PROJECT WITH NO STREAM

SEMESTER A				
CS5222	CS5351	CS5481	CS5491	CS6534
SEMESTER B			**SEMESTER B + SUMMER TERM**	
CS5188	CS5483	CS5489	**CS6520** (6 credit units)	

SAMPLE FULL-TIME STUDY PLAN — INFORMATION SECURITY STREAM

SEMESTER A				
CS5222	CS5351	CS5481	CS5285	CS5294
SEMESTER B				
CS5182	CS5187	CS5483	CS6290	CS6537

SAMPLE PART-TIME STUDY PLAN — ARTIFICIAL INTELLIGENCE STREAM

YEAR 1 SEMESTER A			YEAR 1 SEMESTER B	
CS5222	CS5481	CS5491	CS5182	CS5489
YEAR 2 SEMESTER A			**YEAR 2 SEMESTER B**	
CS5351	CS5486	CS5487	CS5187	CS5188

REQUIRED COURSES

- CS5222 Computer Networks and Internets
- CS5351 Software Engineering
- CS5481 Data Engineering

SAMPLE ELECTIVE COURSES#

- CS5182 Computer Graphics
- CS5187 Vision and Image
- CS5188 Virtual Reality Technologies and Applications
- CS5285 Information Security for eCommerce
- CS5294 Information Security Technology Management
- CS5483 Data Warehousing and Data Mining
- CS5486 Intelligent Systems
- CS5487 Machine Learning: Principles and Practice
- CS5488 Big Data Algorithms and Techniques
- CS5489 Machine Learning: Algorithms and Applications
- CS5491 Artificial Intelligence *(AI stream core)*
- CS6290 Privacy-enhancing Technologies
- CS6520 Project *(6 credit units)*
- CS6534 Guided Study
- CS6535 Guided Study in Artificial Intelligence
- CS6536 Guided Study in Data Science
- CS6537 Guided Study in Information Security

Non-Stream Electives · AI Stream Core/Electives · DS Stream Electives · IS Stream Electives

#Note: Courses offered in each semester are subject to actual student enrolment, staff availability and other considerations.

STUDY PERIOD

Full-time Normal **1 YEAR** / Maximum **2.5 YEARS**

Part-time Normal **2 YEARS** / Maximum **5 YEARS**

UGC Targeted Taught Postgraduate Programmes Fellowships Scheme (for local students)

Fellowship awards are provided by the HKSAR Government for selected local students admitted to this MSCS programme under the Fellowships Scheme which provides tuition subsidy of up to HK$120,000 if approved. All admitted local students will be invited to submit applications for the fellowships.