MASTER OF SCIENCE IN COMPUTER SCIENCE

Department of Computer Science

PROGRAMME CODE: P53

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.

http://www.sgs.cityu.edu.hk/programme/P53

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MASTER OF SCIENCE IN COMPUTER SCIENCE (P53)

DEPARTMENT OF COMPUTER SCIENCE | CITY UNIVERSITY OF HONG KONG

PROGRAMME AIMS

The programme aims to enable computer professionals to effectively and systematically strengthen and upgrade their technical capabilities in meeting increasing demands in computer software systems and services development. The programme broadens the students’ knowledge and deepen their understanding of key issues of specific application domains and areas in computer science. It also prepares graduates to take up advanced innovative development work in the industry or to pursue higher research degree qualifications.

CURRICULUM

To be awarded the Master of Science in Computer Science degree, a student must acquire a minimum of 30 credit units, composed of:

- 9 credit units from required courses
- 21 credit units from elective courses*

*at least 3 credit units from those in Group I

Up to 9 credit units can be transferred based on the student's previous study.

NORMAL STUDY PERIOD

1 year for full-time / 2 years for part-time

MAXIMUM STUDY PERIOD

2.5 years for full-time / 5 years for part-time

Students may freely choose elective courses without concentration, or choose elective courses to concentrate on a study stream:

DATA SCIENCE STREAM

- Big Data Algorithms and Techniques
- Data Warehousing and Data Mining
- Stream Elective (choose at least one)

INFORMATION SECURITY STREAM

- Information Security for eCommerce
- Information Security Management

- Cryptography: Theory and Practice
- Guided Study t
- Privacy-enhancing Technologies
- Topics on Information Security

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

Required Courses (9 credit units)

Computer Networks and Internets • Software Engineering • Data Engineering

Elective Courses (21 credit units)

Group I (at least 3 credit units)

Algorithms & Techniques for Web Searching
- Computer Games Design
- Guided Study
- Machine Learning
- Mobile Computing
- Privacy-enhancing Technologies
- Project (6 credit units)

Topics in Machine Learning
- Topics on Information Security
- Vision and Language

Group II

Big Data Algorithms and Techniques
- Cloud Computing: Theory and Practice
- Computer Graphics
- Cryptography: Theory and Practice
- Data Warehousing and Data Mining
- Distributed Systems
- High Speed Multimedia Networks
- Information Security for eCommerce
- Information Security Technology Management
- Intelligent Systems
- Introduction to eCommerce
- Multimedia Technologies and Applications
- Practical Optimization: Algorithms and Techniques
- Quality Engineering
- Virtual Reality and Game-Engine Technologies
- Vision and Image

Note: Courses offered in each semester are subject to actual student enrolment, staff availability and other considerations. Reimbursable courses for Continuing Education Fund purposes. Eligible applicants (Hong Kong residents) will be reimbursed 80% of the course fee, subject to a maximum sum of HK$10,000, on successful completion of the course. Enquiries: 3142 2777 Website: http://www.wfsfaa.gov.hk/cef

POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE

The Postgraduate Diploma in Computer Science is an intermediate award which a student may obtain after the completion of 24 credit units (including all required courses and at least 3 credit units of elective courses in Group I) with satisfactory results if the student decides not to continue with the Master of Science in Computer Science Programme.

Student Loan

Successful local applicants are eligible to apply for the Government's Non-means-tested Loan Scheme. Application forms are obtainable from each District Office and the Student Finance Office of the Hong Kong Government. Enquiries: 2510 6223 Website: http://www.wfsfaa.gov.hk/sfo

ENTRANCE REQUIREMENTS

To be eligible for admission, you must have:

- 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

- TOEFL
  - A score of 550 (paper-based test), or
  - 213 (computer-based test), or
  - 79 (Internet-based test), OR

- IELTS
  - An overall band 6.5 in International English Language Testing System; OR

- CET6
  - A score of 450 in the new College English Test of Chinese mainland, or
  - a pass in the old CET-6 test, OR

- Other equivalent qualifications

For more details, please refer to http://www.cs.cityu.edu.hk/academic/mscs