Starting 2005, the B.Sc. (Hons) Computer Studies programme will be converted to be an attractive alternative to our Government-funded B.Sc. (Hons) Computer Science programme with the additional flexibility of being offered in both full-time and part-time modes.

The curriculum also follows the same high-quality academic standards as that offered by our highly successful B.Sc. (Hons) Computer Science programme, which is Hong Kong's first CS programme to be accredited by the Hong Kong Institution of Engineers (HKIE).

In addition, this programme will also be taught by the same team of internationally-qualified full-time academic staff that teaches the B.Sc. Computer Science programme. Note that unlike the B.Sc. Computer Science programme, our B.Sc. Computer Studies programme is not a sandwich programme and placement will not be required.

This programme can be a very attractive alternative for full-time/part-time students, from Hong Kong, the mainland of China or nearby region, as well as a top-up path for Higher Diploma or Associate Degree students in related disciplines of Computer Studies.

**Background**

High-technology development is a crucial factor for the continued success of Hong Kong, and healthy technological development depends on the availability of well qualified personnel.

In a recent study performed by HK Government’s “Working Group on Enabling Environment for IT Development,” it indicated that the Government is committed to building a competent IT workforce. The Report estimated that by 2006, the IT manpower requirement will increase to around 70,000 to 80,000. This represents an annual additional training requirement for 4,500 to 5,500 IT employees, of which around 50% should be at degree level or above.

In another report - “Executive Summary Consultancy Study on the Manpower and Training Needs of the Information Technology Sector” – performed by the Price Waterhouse Coopers for the Hong Kong Government, it predicts that the IT manpower shortfall will be as large as between 16,000 to 56,000 by the year 2010! The self-financed BSCS programme is geared towards satisfying these projected demands for IT professionals in Hong Kong.

**Aims of the Programme**

The aims of the programme is to provide the best possible undergraduate education with a well-balanced emphasis on practical hands-on development skills as well as software engineering management know-hows needed to manage and oversee software development teams and projects.

Through in-depth lectures and rigorous tutorials, laboratory work, projects and case studies, students will acquire a thorough understanding of the theories and practical skills behind software development, software engineering, computer networks and security. Graduates can easily leverage this strong foundation to specialize in various technical and managerial positions.

**Strength of the Department**

The Department of Computer Science offers a wide range of taught BSc and MSc programmes as well as MPhil and PhD research programmes which are aimed to equip our graduates with technical skills and professional knowledge needed to play leading roles in the computer industry.

Our staff members have made significant contributions internationally through their research publications in well-known internationally-refereed journals and conferences. They have also contributed locally through the development of real-life systems for local industries; such as multimedia document management system for garment manufacturers, intelligent scheduling system for the airlines & logistics companies, web-based student performance monitoring systems for local schools and a campus public key infrastructure (PKI) for internet security.

Currently, the Department is conducting over 80 research and development projects with total funding over HK$40 million. These projects are funded by government agencies such as the University Grants Committee, the British Council, Industry Department and Health Department; multi-national computing companies such as IBM, SGI, and Sun Microsystem; and charitable trusts such as the Croucher Foundation and Hong Kong Jockey Club. The Department is also active in organizing numerous international-level conferences and workshops.

**Prospects**

Graduates can look forward to professional advancement in technical specializations as well as in systems development management education in Hong Kong or abroad.
Programme Structures

The programme consists of several core courses and a wide range of electives in various areas including Software Engineering, Computer Systems, Information Security, Distributed Systems and Multimedia Computing.

Example programme for student with block credit transfer as well as out-of-discipline (OOD) credit transfer studying part-time (total 49 credit units):

<table>
<thead>
<tr>
<th>CS Courses</th>
<th>credits</th>
<th>Others</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>16</td>
<td>Chinese &amp; English</td>
<td>exempted</td>
</tr>
<tr>
<td>Electives</td>
<td>33</td>
<td>Free Electives</td>
<td>transferred</td>
</tr>
</tbody>
</table>

Example for a full-time student without any credit transfer (total 106 credit units):

<table>
<thead>
<tr>
<th>CS Courses</th>
<th>credits</th>
<th>Others</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>52</td>
<td>Chinese &amp; English</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>33</td>
<td>Free Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

Core Courses
- Computer Organization
- Data Structures and Algorithms
- Software Development Methodologies
- Database Systems
- English Communication Skills for Computing II

Sample Electives
- Advanced Software Engineering
- Advanced Database Systems
- Information Retrieval
- Distributed Systems
- Internet Applications Development
- Internet and Distributed Systems Programming
- Information Security and Management
- Internet Security and E-Commerce Protocols
- Pervasive Computing
- Design and Analysis of Algorithms
- Topics in Theory of Computing
- Computer Architecture
- Computer Graphics
- Multimedia Technologies & Applications
- Chinese Computing
- Information Systems Project Management
- Information Systems Audit

Entrance Requirements

For admission to the programme, applicants must satisfy the City University's General Entrance Requirements.

In addition, for students holding a Higher Diploma or Associate Degree in Computer Studies or other relevant disciplines, they will be able to obtain credit transfers on the basis of their academic performance.

Fees

This programme is offered as a self-financed programme. Attractive scholarships will be awarded to qualified students after successfully passing the first year of studies. Each applicant will automatically be considered for scholarship and tentative approval will be made during admissions.

Important Note: The information given in this leaflet is only indicative. For the definitive requirements, please consult the University Prospectus.

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