# HONG KONG METROPOLITAN UNIVERSITY (Formerly The Open University of Hong Kong) 

## Programme Requirements for Bachelor of Science with Honours in Computer Science (BSCHCSJ)

To be eligible for the award of the Bachelor of Science with Honours in Computer Science, a student shall obtain the required number of credits specified for the Year of Entry, in courses prescribed and detailed in the course tables below.

For students admitted via Year 1 entry in or after 2021/22, via Year 2 entry in or after 2022/23 and via Year 3 entry in or after 2023/24, they must complete the four University Core Values Modules, namely Core Value I (Integrity), Core Value II (Fairness), Core Value III (Perseverance), and Core Value IV (Innovation) for graduation.

## Year 1 Entry

A student admitted to the programme through Year 1 Entry is required to complete a total of 160 credits as prescribed below, of which no more than 40 credits should be taken at Foundation Level:

1. 75 credits of core courses in Tables 1, 2 and 3;
2. 15 credits of outside discipline courses in Table 4;
3. 30 credits of elective courses from Table 5;
4. 10 credits of project course in Table 6;
5. 10 credits of English Language Enhancement courses *; and

* Note: Please refer to the updated list of English Language Enhancement courses posted on the University website (www.hkmu.edu.hk/FT_ENGLISH).

6. 20 credits of purpose-designed General Education courses \#.
\# Note: Please refer to the updated list of purpose-designed General Education courses posted on the University website (www.hkmu.edu.hk/FT_GE).

## Year 2 Entry

A student admitted to the programme through Year 2 Entry is required to complete a total of $120^{\wedge}$ credits as prescribed below, of which no more than 20 credits should be taken at Foundation Level:

1. IT S 103 F from Table 1;
2. 65 credits of core courses in Table 2 and 3;
3. IT S290F and STAT S261F from Table 4;
4. 30 credits of elective courses from Table 5; and
5. 10 credits of project course in Table 6 .
^ Note: A student who does not have sufficient mathematics and/or IT background may be required to take extra courses, IT S102F and/or MATH S141F. Thus, such student may be required to complete a total of 130 credits in order to fulfil programme requirements.

## Year 3 Entry

A student admitted to the programme through Year 3 Entry is required to complete a total of 80 credits as prescribed below:

1. COMP S265F from Table 2;
2. 30 credits of core courses in Table 3;
3. IT S290F from Table 4;
4. 30 credits of elective courses from Table 5; and
5. 10 credits of project course in Table 6.

Table 1: Core Courses (Foundation Level)

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| IT S102F | Computing Fundamentals | 5 | Foundation | - |
| IT S103F | Introduction to Internet Application <br> Development | 5 | Foundation | - |

Table 2: Core Courses (Middle Level)

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| COMP S202F | Java Programming Fundamentals | 5 | Middle | b |
| COMP S208F | Introduction to Computer <br> Programming | 5 | Middle | b |
| COMP S209F | Data Structures, Algorithms and <br> Problem Solving | 5 | Middle | b |
| COMP S264F | Discrete Mathematics | 5 | Middle | b |
| COMP S265F | Design and Analysis of Algorithms | 5 | Middle | b |
| COMP S266F | Computer Architecture | 5 | Middle | b |
| COMP S267F | Operating Systems | 5 | Middle | b |

Table 3: Core Courses (Higher Level)

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| COMP S312F | Java Application Development | 5 | Higher | a or b |
| COMP S313F | Mobile Application Programming | 5 | Higher | a or b |
| COMP S320F | Database Management | 5 | Higher | a or b |
| COMP S350F | Software Engineering | 5 | Higher | a or b |
| COMP S380F | Web Applications: Design and <br> Development | 5 | Higher | a or b |
| COMP S381F | Server-side Technologies and Cloud <br> Computing | 5 | Higher | a or b |

Table 4: Outside Discipline Courses

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| MATH S141F | Algebra and Calculus | 5 | Foundation | - |
| IT S290F | Human Computer Interaction and <br> User Experience Design | 5 | Middle | b |
| STAT S261F | Data Analytics with Applications | 5 | Middle | b |

Table 5: Elective Courses

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| COMP S321F | Advanced Database and Data <br> Warehousing | 5 | Higher | a or b |
| COMP S333F | Advanced Programming and AI <br> Algorithms | 5 | Higher | a or b |
| COMP S351F | Software Project Management | 5 | Higher | a or b |
| COMP S362F | Concurrent and Networks <br> Programming | 5 | Higher | a or b |
| COMP S363F | Distributed Systems and Parallel <br> Computing | 5 | Higher | a or b |
| COMP S382F | Data Mining and Analytics | 5 | Higher | a or b |
| COMP S390F | Creative Programming for Games | 5 | Higher | a or b |


| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| COMP S492F | Machine Learning | 5 | Higher | a or b |
| ELEC S305F | Computer Networking | 5 | Higher | a or b |
| ELEC S348F | IoT Security | 5 | Higher | a or b |
| ELEC S371F | Digital Forensics | 5 | Higher | a or b |
| ELEC S425F | Computer and Network Security | 5 | Higher | a or b |
| ELEC S431F | Blockchain Technologies | 5 | Higher | a or b |

Table 6: Project Course

| Course Code | Course Title | Credits | Course <br> Level | Course Group <br> for Honours <br> Classification |
| :--- | :--- | :---: | :---: | :---: |
| COMP S456F | Software System Development <br> Project | 10 | Higher | a |

## Note:

1. If students wish to retake counterpart course(s) in e-learning mode, they should seek Programme Leader's approval, with due consideration of factors such as clash of timetabling and availability of distance learning counterparts, etc.

## Honours Classification

For the purpose of honours classification of the Bachelor of Science with Honours in Computer Science programme, relevant courses are categorized as Group (a) and Group (b) as shown in Tables 2, 3, 4, 5 and 6.

Group (a) shall consist of COMP S456F ( 10 credits), and the best 30 credits from the remaining Higher level courses listed in Tables 3 and 5.

Group (b) shall consist of the best 40 credits in courses at Middle or Higher level listed in the Tables 2, 3, 4 and 5, where such credits are not taken into account in Group (a) courses.

Group (a) courses shall be weighted the same as Group (b) courses.

