# 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<sup>^</sup> credits as prescribed below, of which no more than 20 credits should be taken at Foundation Level:

- 1. IT S103F 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 Level	Course Group for Honours Classification
IT S102F	Computing Fundamentals	5	Foundation	-
IT S103F	Introduction to Internet Application Development	5	Foundation	-

Table 2: Core Courses (Middle Level)

Course Code	Course Title	Credits	Course Level	Course Group for Honours Classification
COMP S202F	Java Programming Fundamentals	5	Middle	ь
COMP S208F	Introduction to Computer Programming	5	Middle	b
COMP S209F	Data Structures, Algorithms and Problem Solving	5	Middle	b
COMP S264F	Discrete Mathematics	5	Middle	ь
COMP S265F	Design and Analysis of Algorithms	5	Middle	ь
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 Level	Course Group for Honours 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 Development	5	Higher	a or b
COMP S381F	Server-side Technologies and Cloud Computing	5	Higher	a or b

Table 4: Outside Discipline Courses

Course Code	Course Title	Credits	Course Level	Course Group for Honours Classification
MATH S141F	Algebra and Calculus	5	Foundation	-
IT S290F	Human Computer Interaction and 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 Level	Course Group for Honours Classification
COMP S321F	Advanced Database and Data Warehousing	5	Higher	a or b
COMP S333F	Advanced Programming and AI Algorithms	5	Higher	a or b
COMP S351F	Software Project Management	5	Higher	a or b
COMP S362F	Concurrent and Networks Programming	5	Higher	a or b
COMP S363F	Distributed Systems and Parallel 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 Level	Course Group for Honours 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 Level	Course Group for Honours Classification
COMP S456F	Software System Development 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.

Last update: August 2022