

Programme Requirements for Bachelor of Science with Honours in Computer Science

This 3-credit-unit system programme requirements document is applicable to the following student cohorts:

<i>Year of Entry</i>	<i>Admission cohort</i>
<i>Year 1</i>	<i>2023/24 and thereafter</i>
<i>Year 2</i>	<i>2024/25 and thereafter</i>
<i>Year 3</i>	<i>2025/26 and thereafter</i>

1. Programme Requirement – Year 1 Entry

1.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Computer Science through Year 1 Entry, a student shall:

1.1.1 obtain 120 credit-units as prescribed below, of which no more than 30 credit-units shall be at 1000-level, at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

1.1.1.1 75 credit-units of core courses applicable to Year 1 entry as listed in Table 1;

1.1.1.2 24 credit-units of elective courses in specific area in Table 2, of which at least 18 credit-units must be at 4000-level;

1.1.1.3 9 credit-units of University Core courses in Table 3;

1.1.1.4 6 credit-units of University English courses in Table 4;

1.1.1.5 6 credit-units of General Education (GE) courses (see www.hkmu.edu.hk/FT_GE for the updated list of GE courses)

and

1.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

2. Programme Requirement – Year 2 Entry

2.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Computer Science through Year 2 Entry, a student shall:

2.1.1 obtain 90 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

2.1.1.1 57 credit-units of core courses applicable to Year 2 entry as listed in Table 1;

2.1.1.2 24 credit-units of elective courses in specific area in Table 2, of which at least 18 credit-units must be at 4000-level;

1.1.1.1 9 credit-units of University Core courses in Table 3;

and

1.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

3. Programme Requirement – Year 3 Entry

3.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Computer Science through Year 3 Entry, a student shall:

3.1.1 obtain 63 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

3.1.1.1 30 credit-units of core courses applicable to Year 3 entry as listed in Table 1;

3.1.1.2 24 credit-units of elective courses in specific area in Table 2, of which at least 18 credit-units must be at 4000-level;

3.1.1.3

3.1.1.4 9 credit-units of University Core courses in Table 3;

and

3.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

Table 1: Core Courses

Course Code	Course Title	Credit-units	Year Entry		
			1	2	3
COMP 1080SEF	Introduction to Computer Programming	3	✓		
COMP 2090SEF	Data Structures, Algorithms & Problem Solving	3	✓		
COMP 2020SEF	Java Programming Fundamentals	3	✓	✓	
COMP 2030SEF	Intermediate Java Programming & User Interface Design	3	✓	✓	
COMP 2640SEF	Discrete Mathematics	3	✓	✓	
COMP 2650SEF	Design and Analysis of Algorithms	3	✓	✓	
COMP 2660SEF	Computer Architecture	3	✓	✓	
COMP 2670SEF	Operating Systems	3	✓	✓	
COMP 3120SEF	Java Application Development	3	✓	✓	✓
COMP 3130SEF	Mobile Application Programming	3	✓	✓	✓
COMP 3200SEF	Database Management	3	✓	✓	✓
COMP 3500SEF	Software Engineering	3	✓	✓	✓
COMP 3510SEF	Software Project Management	3	✓	✓	✓
COMP 3800SEF	Web Applications: Design and Development	3	✓	✓	✓

Course Code	Course Title	Credit-units	Year Entry		
			1	2	3
COMP 3810SEF	Server-Side Technologies & Cloud Computing	3	✓	✓	✓
COMP 3920SEF	Machine Learning	3	✓	✓	✓
COMP 4560SEF	Software System Development Project	6	✓	✓	✓
IT 1020SEF	Computing Fundamentals	3	✓		
IT 1030SEF	Introduction to Internet Application Development	3	✓		
IT 2900SEF	Human Computer Interaction & User Experience Design	3	✓	✓	
MATH 1410SEF	Algebra and Calculus	3	✓		
MATH 2150SEF	Linear Algebra	3	✓	✓	
STAT 1510SEF	Probability & Distributions	3	✓		
STAT 2610SEF	Data Analytics with Applications	3	✓	✓	

Table 2: Elective Courses in Specific Area

Course Code	Course Title	Credit-units
COMP 4210SEF	Advanced Database and Data Warehousing	3
COMP 4330SEF	Advanced Programming and AI Algorithms	3
COMP 4620SEF	Concurrent and Networks Programming	3
COMP 4630SEF	Distributed Systems and Parallel Computing	3
COMP 4820SEF	Data Mining and Analytics	3
COMP 4900SEF	Creative Programming for Games	3
COMP 4930SEF	Deep Learning	3
ELEC 3050SEF	Computer Networking	3
ELEC 3470SEF	Multimedia Technologies	3
ELEC 4310SEF	Blockchain Technologies	3
ELEC 4480SEF	IOT Security	3
ELEC 4710SEF	Digital Forensics	3
COMP 4950SEF	Professional Placement	3

Table 3: University Core Courses

Course Code	Course Title	Credit-units
UNI 1002ABW	University Core Values	2
UNI 1012ABW	Social Responsibilities	1
UNI 2002BEW	Effective Communication and Teamwork	3
UNI 3002BEW	Entrepreneurial Mindset and Leadership for Sustainability	3

Table 4: University English Courses

Course Code	Course Title	Credit-units
ENGL 1101AEF	University English: Reading and Writing	3
ENGL 1202EEF	University English: Listening and Speaking	3

November 2023