Programme Requirements for
Bachelor of Science with Honours in Data Science and Artificial Intelligence

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

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

1. Programme Requirement – Year 1 Entry

1.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Data Science and Artificial Intelligence 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 90 credit-units of core courses applicable to Year 1 entry as listed in Table 1;

1.1.1.2 9 credit-units of elective courses in Table 2;

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 3 Entry

2.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Data Science and Artificial Intelligence through Year 3 Entry, a student shall:

2.1.1 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:

2.1.1.1 45 credit-units of core courses applicable to Year 3 entry as listed in Table 1;

2.1.1.2 9 credit-units of elective courses in specific area in Table 2;

2.1.1.3 9 credit-units of University Core courses in Table 3;

and

2.1.2 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	Year Entry 3
COMP 1080SEF	Introduction to Computer Programming	3	✓	
COMP 2020SEF	Java Programming Fundamentals	3	✓	
COMP 2030SEF	Intermediate Java Programming & User Interface Design	3	✓	
COMP 2090SEF	Data Structures, Algorithms & Problem Solving	3	✓	
COMP 2640SEF	Discrete Mathematics	3	✓	
COMP 3130SEF	Mobile Application Programming	3	✓	✓
COMP 3200SEF	Database Management	3	✓	✓
COMP 3500SEF	Software Engineering	3	✓	✓
COMP 3510SEF	Software Project Management	3	✓	✓
COMP 3810SEF	Server-Side Technologies & Cloud Computing	3	✓	✓
COMP 3920SEF	Machine Learning	3	✓	✓
COMP 4210SEF	Advanced Database & Data Warehousing	3	✓	✓
COMP 4330SEF	Advanced Programming & AI Algorithms	3	✓	✓
COMP 4600SEF	Advanced Topics in Data Mining	3	✓	✓
COMP 4610SEF	Data Science Project	6	✓	✓
COMP 4820SEF	Data Mining & Analytics	3	✓	✓
COMP 4930SEF	Deep Learning	3	✓	✓
IT 1020SEF	Computing Fundamentals	3	✓	
IT 1030SEF	Introduction to Internet Application Development	3	✓	
IT 2900SET	Human Computer Interaction & User Experience Design	3	✓	
MATH 1410SEF	Algebra & Calculus	3	✓	
MATH 2150SEF	Linear Algebra	3	✓	
STAT 1510SEF	Probability & Distributions	3	✓	
STAT 2510SEF	Statistical Data Analysis	3	✓	
STAT 2520SEF	Applied Statistical Methods	3	✓	
STAT 2610SEF	Data Analytics with Applications	3	✓	
STAT 2630SEF	Big Data Analytics with Applications	3	✓	
STAT 3110SEF	Time Series Analysis & Forecasting	3	✓	✓
STAT 3660SEF	SAS Programming	3	✓	✓

Table 2: Elective Courses

Course Code	Course Title	Credit-units
COMP 4630SEF	Distributed Systems & Parallel Computing	3
ELEC 3050SEF	Computer Networking	3
ELEC 3250SEF	Computer & Network Security	3
ELEC 4310SEF	Blockchain Technologies	3
ELEC 4710SEF	Digital Forensics	3
MATH 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

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