

**THE UNIVERSITY OF HONG KONG
FACULTY OF ENGINEERING**

Minor in Data Science & Engineering

(Applicable to the target students admitted in academic year 2020-21 and thereafter)*

Credit Unit Statement

The Minor in Data Science & Engineering programme offers two types of courses, namely introductory courses and advanced courses. The total study load of this Minor programme (36 credits of courses) is in the range of 720 to 1,080 hours. All courses carry 6 credits and are taught through lectures, tutorials and laboratory sessions aimed at equipping students with professional skills and knowledge in data science and engineering. A 6-credit course has around 120-180 hours of student learning activities (including both contact hours and all other forms of student learning activities). The contact hours and expected learning outcomes for different groups of courses vary according to the learning modes adopted. Most courses are assessed through continuous assessment (combining for 10% to 100%) and written examination (0% – 90%), with a few courses to be assessed through 100% continuous assessment. The two categories of courses are summarized as follows:

Introductory course (6 credits)

These courses aim at providing students with a solid foundation in data science, and computing knowledge.

The total contact hours ranging from 39 to 52 hours consists of a combination of lectures (totaling 26 to 39 hours) and tutorials/workshops/laboratory sessions (totaling 13 to 26 hours). The assessment is generally based on problem-solving type assignments, programming exercises, course projects, programming projects, mid-term/written quizzes and written examination. The written examination is normally 3 hours. The weighting of continuous assessment and examinations are 10% to 100% and 0% to 90% respectively.

The number of and level of assignments, programming tasks, mathematical calculations, course projects and quizzes shall be appropriate for assessing the learning outcome of the students but in all cases written output shall not exceed 3,000 words.

Advanced course (6 credits)

These courses aim at providing students with in-depth knowledge in a broad range of topics in data science.

For COMP courses, the total contact hours ranging from 39 to 52 hours consists of a combination of lectures (totaling 26 to 39 hours) and tutorials/workshops/laboratory sessions (totaling 13 to 26 hours). The assessment is generally based on problem-solving type assignments, programming tasks, course projects, mid-term/written quizzes and written examination. The written examination is normally 3 hours. The weighting of continuous assessment and examinations are both from 30% to 70%. The number of and level of assignments, programming tasks, mathematical calculations, course projects and quizzes shall be appropriate for assessing the learning outcome of the students but in all cases written output shall not exceed 3,000 words.

The STAT courses are taught predominantly by lectures (36 hours) and tutorials (12 hours). Assessment is by a combination of examination (0-75%) and continuous assessment/coursework (25-100%). The latter includes written assignments (totaling no more than 8,000 words) such as essays and project reports, and oral presentations. Details of the assessment tasks can be found in the description of individual courses.

June 2021

*Note: Applicable to students of the Bachelor of Engineering (BEng) curricula admitted in the academic year 2020-21 and thereafter, with the exception of students of the BEng in Computer Engineering and BEng in Computer Science curricula, and other BEng students who have pursued a second Major or a Minor in Computer Science.