

# THE UNIVERSITY OF HONG KONG

## **Bachelor of Engineering Degree in Engineering Science**

(Applicable to students admitted in the 2018-19 academic year and thereafter)

### **Credit Unit Statement**

The Engineering Science curriculum consists of three types of courses, namely introductory courses, advanced courses and projects. The majority of courses are 6-credit professional courses which are taught through lectures, tutorials, and laboratory sessions aimed at equipping students with professional skills and knowledge in mathematics and engineering. 120 hours of student learning activity (including both contact hours and all other forms of student learning activity) will be the norm for a 6-credit course, and the contact hours and expected learning outcomes for different groups of courses vary according to the learning modes employed. Most courses are assessed through practical work and continuous assessment (20% - 70%) and written examination (30% - 80%), with a few courses to be assessed through 100% continuous assessment. The three categories of engineering science courses are summarized as follows:

#### **Introductory Courses (6 credits)**

These courses aim at providing students with a solid foundation in mathematics, engineering, communication skills and complementary studies.

The total contact hours ranging from 39 to 52 hours consist of a combination of lectures, tutorials and laboratories. The assessment is generally based on assignments, quizzes, course projects, mid-term tests, oral presentation, practical work, laboratory reports (totaling 1,000-2,000 words) and written examination. The written examination is normally 3 hours.

The number of and level of assignments, 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 (laboratory reports not included).

#### **Advanced Courses (6 credits)**

These courses aim at providing students with a breadth of knowledge in a broad range of technical courses, in-depth knowledge in selective subjects, effective communication skills and complementary studies.

The total contact hours ranging from 39 to 52 hours consist of a combination of lectures, tutorials and laboratories. The assessment is generally based on assignments, quizzes, course projects, mid-term tests, oral presentation, practical work, laboratory reports (totaling 1,000-2,000 words) and written examination. The written examination is normally 3 hours.

The number of and level of assignments, 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.

#### **Project Courses (6 or 12 credits)**

Project courses are under the category of Capstone Experience and may consist of individual or group projects over a period of one year to enable students to integrate and consolidate the knowledge gained in various courses, and apply it to an assigned project. The total contact hours ranges from 26 to 39 hours. The assessment of project courses is based on project presentations and written reports totaling 500-1,500

words (for interim report) and 1,500-3,000 words (for final report). Students may also be required to attend seminars.

The 6-credit project consists of 30-39 hours of timetabled work, comprising lectures (4-6 hours) and laboratories (26-33 hours). Students will need to spend additional time in the laboratory beyond the timetabled hours to complete their practical implementation. Students are expected to submit a report of around 5,000 words.

For the 12-credit project, it is expected that there will be 30 contact hours and students will spend on-fifth of their work hours of the project over a period of two semesters. Students are expected to submit a report of around 13,000 words.

Faculty of Engineering  
October 2020