

# THE UNIVERSITY OF HONG KONG

## Bachelor of Engineering Degree in Civil Engineering

### Credit Unit Statement

The Civil Engineering curriculum offers 4 types of courses, namely introductory courses, advanced courses, projects and internship. The majority of the 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. The programme also has one 6-credit course Capstone Design Project and one 12-credit course Final Year Project as Capstone Experience. 120 hours of student learning activities (including both contact hours and all other form of student learning activities) will be the norm for a 6-credit course, whereas 240 hours of student learning activity will be the norm for a 12-credit course, and the contact hours and expected learning outcomes for different groups of courses vary according to the learning modes adopted. Most courses are assessed through practical work, continuous assessment (combining for 20% to 40%) and written examination (60% to 80%), with a few courses to be assessed through 100% continuous assessment. The four categories of civil engineering 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 26 to 52 hours consists of a combination of lectures, tutorials and laboratory sessions. The assessment is generally based on assignments, quizzes, course projects, mid-term tests, oral presentation, practical work, laboratory reports (totaling 1,000 to 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 selected subjects with special emphasis on topics related to civil engineering, effective communication skills, complementary studies including economics, management, legal environment, engineering ethics, etc.

The total contact hours ranging from 26 to 52 hours consists of a combination of lectures, tutorials and laboratory sessions. The assessment is generally based on assignments, quizzes, course projects, mid-term tests, oral presentation, practical work, laboratory reports (totaling 1,000 to 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).

### **Projects (6 or 12 credits)**

Project courses are under the category of Capstone Experience and may consist of individual or group project 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. There are two types of projects: Capstone Design Project and Final Year Project, and students are expected to take them in their final year of studies.

The Capstone Design Project aims at facilitating students to learn to solve a real work civil engineering projects using the teamwork approach. It consists of a total of 39 hours of timetabled work, including lectures (totaling 11 hours) and group work. Students are required to spend additional time to learn and participate in the feasibility stage, stages of conceptual and detailed design and final planning for the project implementation.

The Final Year Project is an individual project in the form of individual dissertation or report on a topic proposed by teachers, covering the design, experimental or analytical investigation.

The assessment of project courses is based on project presentations and written reports totaling 1,500-3,000 words. Students may also be required to attend seminars.

### **Internship (6 credits)**

The internship aims at immersing students into a work environment where their practical engineering knowledge can be reinforced in applied situations. It consists of a minimum of 4 weeks of placement in an industrial organization with an engineering environment. Students are required to submit a training report after the internship. The assessment is based on the employer's feedback and the training report totaling not more than 1,000 words.

Faculty of Engineering

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