Appendix 1

THE UNIVERSITY OF HONG KONG

Master of Science in Sustainable Environmental Design

CREDIT UNIT STATEMENT

Overview

Candidates entering the Master of Science in Sustainable Environmental Design will take a total of 60 credits for the one-year full time or two-year part-time curriculum, consisting of 48 credits of core courses and 12 credits of elective courses. All curriculum courses are 6 credit courses including both core courses and elective courses using distinctive teaching and learning modes. 120 hours of student learning activity (including both contact hours and all other forms of student learning activity) is the norm for a 6-credit course. The total study load of this curriculum is 1,200 hours of student learning activity. The proposed curriculum consists of three types of courses, including 1) Advanced knowledge and theory of environmental design and urban sustainability; 2) Environmental simulation tools and green building performance assessment systems; 3) Dissertation. The three course categories are summarized below:

1) Advanced knowledge and theory of environmental design and urban sustainability

There are four core courses which provide students with the scientific methods and techniques in urban and environmental evaluation to analyse and understand environmental design and urban sustainability problems and issues involved - (SEED6101 Bioclimatic Building Design; SEED6201 Green Building Assessment and Climate Responsive Design; SEED6202 City Risk and Resilience: Emerging Planning Theories and Practices; SEED6203 Designing for a Changing Climate). In addition, there are five elective courses in this category (SEED6301 Building and Urban Acoustics; SEED6302 Selective Environment-Landscape – Case Studies; SEED6303 Environmental Policy and Management for Megacities; SEED6305 Topical Study I in Environmental Design; SEED6306 Topical Study II in Sustainable Design and Urban Development). Teaching is conducted in lectures and/or tutorials/seminars (normally 24 contact hours per course) and activities include workshops, practical sessions, case studies, assignments, and project reports. All these courses are assessed through a combination of continuous coursework assessment (70%-100%) and examination (0-30%). Assessment methods are decided by the Programme Director and course leader to align with the course learning outcomes, and may include essays and reports (of around 3000-5000 words), in-class tests, class participation, teamwork performance, written examination, etc.

2) Environmental simulation tools and green building performance assessment systems

These courses introduce state-of-the-art environmental simulation tools, green building performance assessments techniques and the related science. They also introduce best practice via case studies of authentic green building projects. Teaching is conducted in lectures and/or tutorials/seminars (normally 24 contact hours per course) and activities include site visits, workshops, practical sessions, case studies, the preparation of assignments, and project reports. There are two core courses (SEED6102 Innovation and Smart Technology for Sustainable Development; SEED6103 Environmental Simulation and Performance Assessment Tools) and one elective course (SEED6304 Life Cycle Assessment and Net-Zero Carbon

Emission) in this category. All courses are assessed through continuous coursework assessment. Assessment tasks may include the writing of essays and reports of not more than 5,000 words, in-class tests, class participation, teamwork performance, etc.

3) Dissertation

The two articulated dissertation-related courses (SEED6104 and SEED6204) aim to provide students with opportunities to demonstrate their research interests and capacity and to integrate the acquired knowledge, skills and techniques to evaluate urban and environmental performance. Students can choose their own research topic at the discretion of a dedicated supervisor. Contact hours are flexibly organized between students and supervisors, but not less than 24 contact hours/course are required. Each student is assigned a dissertation supervisor.

In SEED6104, briefings on the research proposal, research design, and methodology will be provided to facilitate dissertation preparation in Semester 1. Students are expected to produce a study report to define their study topics, conduct literature review, and perform preliminary case studies. The whole study report should be no more than 6000 words.

Later in SEED6204, students further develop their study report into a dissertation under supervisors' guidance. Individual students are required to justify and refine their research questions, conduct environmental performance evaluation related study/design project and regularly report their progress to their supervisors. The total written output of these two courses is a final dissertation ranging from 15,000 to 20,000 words in length and is assessed through continuous assessment and by the final dissertation submitted. The examiners may require an oral examination of the dissertation subject.

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