# Master of Philosophy (MPhil) Program in Technology Leadership and Entrepreneurship

Curriculum for Master of Philosophy (MPhil) Program in Technology Leadership and Entrepreneurship

The Master of Philosophy (MPhil) program is designed to introduce a high quality, multi-disciplinary educational research program in niche areas with technology transfer and entrepreneurship elements; and to train technology leaders and entrepreneurs for Hong Kong, Pearl River Delta region and beyond.

The MPhil (TLE) program aims to specifically address students' development in technology innovation, leadership skills and capability for entrepreneurship, and to cultivate strong analytical, managerial, and leadership skills to prepare engineers to become technology leaders and entrepreneurs of the future. Students can choose from a list of approved courses at postgraduate level in the field of leadership, management, entrepreneurship and technology offered by not only the School of Engineering but also other Schools.

All students are required to station at Clear Water Bay campus for their first year of study. After that, students are required to undertake an industrial internship in Hong Kong, Mainland China (e.g. Nansha, Shenzhen or Hangzhou) or other places within the industry, government or research centers, and to complete their MPhil thesis under the supervision of their adviser.

## Program Requirements

Students are required to complete 11 credits of coursework requirements as follows:

# a) <u>Technology Leadership and Entrepreneurship Course</u>

Students are required to complete ENGG 5001 Technology Leadership and Entrepreneurship (2 credits) offered by the School of Engineering.

## b) Technology Course

Students are required to complete one technology course (3 credits) outside their host department within the School of Engineering/School of Science, in addition to at least two technology courses (6 credits) from their host department. Under the circumstances that no technology courses are available in their host department, the 6 credits could be fulfilled by two technology courses within the School of Engineering/School of Science.

In addition to the coursework requirements, students are required to fulfill other graduation requirements as follows. Students are required to obtain grade B or above in these courses. Subject to the prior approval of the Program Director, students may be granted credit transfer to the program on a case-by-case basis.

## c) Leadership, Management and Entrepreneurship

Students are required to gain exposure to leadership, management and

entrepreneurship via taking two courses (a minimum of 4 credits and a maximum of 6 credits) from the following list\* offered by the School of Business and Management, the School of Humanities and Social Science and the School of Engineering. The credits earned from these courses cannot be counted toward the credit requirements.

Accounting Foundations
High-Tech Innovation and Entrepreneurship
Technology and Innovation: Social and Business Perspectives
Innovation and Intellectual Property Law
Technology Entrepreneurship
Entrepreneurship and Small Business Studies
Venture Capital Perspective on Entrepreneurship
Science and Technology in Hong Kong

Exact courses to be offered will be announced at the beginning of each term.

## d) <u>Industrial Internship</u>

Students are required to undertake ENGG 6100 Industrial Internship for at least 2 months during the Summer Term of their 1<sup>st</sup> year of study or during their 2<sup>nd</sup> year of study. The industrial internship can be conducted in Hong Kong, Mainland China, other places within the industry or research centers. Industrial internship opportunities will be provided through research centers of the Fok Ying Tung Research Institute, or other mainland enterprises. During the practicum periods, students will maintain their regular full-time student status. The 1 credit earned from ENGG 6100 cannot be counted toward the credit requirements.

# e) Language Requirement

Students are required to take and pass LANG 5080 English Seminar and Presentation Skills while they are stationed at the Clear Water Bay campus. The 3 credits earned from LANG 5080 cannot be counted toward the credit requirements.

## f) Professional Development Requirement

Students are required to take and pass ENGG 6770 Professional Development in Engineering in their first 1.5 years of study. Students may be exempted from certain course events, subject to prior approval of the School. The 1 credit earned from ENGG 6770 cannot be counted toward the credit requirements.

## g) Technology Leadership and Entrepreneurship Seminar

Students are required to take and pass ENGG 6000 Technology Leadership and Entrepreneurship Seminar for one term during their study. The 1 credit earned from ENGG 6000 cannot be counted toward the credit requirements.

## h) MPhil Thesis Research

Students are required to register in ENGG 6990 MPhil Thesis Research, and submit an MPhil thesis related to their industrial internship experience which

forms an integral part of the thesis. Students should also demonstrate their understanding of the commercial and application aspects of their industrial internship experience in the MPhil thesis, and defend it before the Thesis Examination Committee at HKUST Clear Water Bay campus. The thesis examination should also include a demonstration of a product, service and impact, etc.