

Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) Programs in Industrial Engineering and Logistics Management

Curriculum for Master of Philosophy (MPhil) Program in Industrial Engineering and Logistics Management *

The Master of Philosophy (MPhil) program focuses on strengthening the students' background in their chosen areas of concentration, and training them for engineering research and development. It is highly suitable for individuals with aspirations to take leading technical roles in Hong Kong's high value-added business organizations.

Students are required to take a minimum of 15 credits of approved PG coursework, with at least three courses (9 credits) selected from the following list:

IELM	5110	Information System Design
IELM	5170	Advanced Production Planning and Control
IELM	5230	Deterministic Models in Operations Research
IELM	5250	Stochastic Models in Operations Research
IELM	5260	Design and Analysis of Engineering Experiments
IELM	5270	Engineering Statistics
IELM	5320	Design for People
IELM	5520	Contextual Design for Decision Support Systems

Students are also required to participate in IELM 6800 Departmental Seminar for at least two terms.

Students must pass LANG 5001 Postgraduate English for Academic Purposes, the one credit earned from which cannot be counted toward the degree requirements. Students can be exempted from taking LANG 5001 with the approval of the Department Head and PG Coordinator.

To complete the degree program, a student must register in IELM 6990 MPhil Thesis Research, and satisfactorily complete a thesis to demonstrate competency in engineering research.

Energy Technology Concentration

In addition to the program requirements specified above, students who opt for the Energy Technology concentration are required to:

- Take one ENEG course;
- Complete ENEG 6010 Advanced Topics in Energy Technology for one term. They can use ENEG 6010 to replace one term of registration of IELM 6800; and
- Conduct research in energy area.

* *Program curriculum is subject to Senate approval.*

Curriculum for Doctor of Philosophy (PhD) Program in Industrial Engineering and Logistics Management *

The Doctor of Philosophy (PhD) program caters for students who wish to pursue a career in advanced industrial research and development, or university research and teaching. It emphasizes training in original thinking and independent research. Students are free to design the program of study most suitable to their interests and needs. The program of study should cover a specialized area in industrial engineering.

The PhD program aims at developing a student's skills in identifying issues related to a theoretical problem or a practical application, formulating an original research project that addresses some of the significant issues, and independently creating an effective solution to the problem.

Students who have a bachelor's degree are required to take a minimum of 36 credits of approved coursework. Students entering with master's degrees from other universities may be granted credit transfer of up to 12 credits. Subject to the approval of the student's thesis supervisor and the PG Committee, a maximum of 6 credits of UG 4000-level coursework may be counted toward the degree requirements.

Specific program requirements are as below:

1. Taking five courses from the following list:

IELM 5110	Information System Design
IELM 5170	Advanced Production Planning and Control
IELM 5230	Deterministic Models in Operations Research
IELM 5250	Stochastic Models in Operations Research
IELM 5260	Design and Analysis of Engineering Experiments
IELM 5270	Engineering Statistics
IELM 5320	Design for People
IELM 5520	Contextual Design for Decision Support System
2. Taking at least one 3-credit 6000-level course subject to the approval of the supervisor;
3. Passing LANG 5001 Postgraduate English for Academic Purposes, the one credit earned from which cannot be counted toward the degree requirements. Students can be exempted from taking LANG 5001 with the approval of the Department Head and PG Coordinator;
4. Taking IELM 6800 Departmental Seminar for at least four terms during their residency. Part-time students may be exempted from this requirement;
5. Passing the qualifying examination and the preliminary oral examination to review and approve the student's written thesis research proposal; and
6. Registration in IELM 7990 Doctoral Thesis Research;

7. Presentation and oral defense of the PhD thesis.

Energy Technology Concentration

In addition to the program requirements specified above, students who opt for the Energy Technology concentration are required to:

- Take one ENEG course;
- Complete ENEG 6010 Advanced Topics in Energy Technology for one term. They can use ENEG 6010 to replace one term of registration of IELM 6800; and
- Conduct research in energy area.

* *Program curriculum is subject to Senate approval.*