

Master of Philosophy (MPhil) Program in Advanced Materials Engineering

The Master of Philosophy (MPhil) program in Advanced Materials Engineering is offered under the HKUST Fok Ying Tung Graduate School, in collaboration with the Mechanical, Chemical and Biomolecular, and Civil and Environmental Engineering departments of the School of Engineering. This program provides a unique opportunity for students to engage in a broad spectrum of materials-related research topics that are of interest across various engineering disciplines/departments.

Students enrolled in this program are required to complete coursework and conduct research leading to the writing and defense of an MPhil thesis.

Program Requirements

Credits

1. Students are required to complete at least 15 credits of PG courses, of which 12 credits must be from courses in disciplines related to student's fields of research, including 9 credits from:

CENG	5400	Advanced Transport Phenomena
CENG	5510	Processing of Polymers and Polymer Composites
CENG	5840	Nanomaterials for Chemical Engineering Applications
CIVL	5830	Advanced Mechanics of Materials
CIVL	5840	Advanced Concrete Technology
CIVL	5850	Renovation Engineering
IELM	5260	Design and Analysis of Engineering Experiments
IELM	5310	Six Sigma Management Techniques
MECH	5010	Foundation of Solid Mechanics
MECH	5040	Nanoscale Thin Films and Nano-Structure Materials
MECH	5050	Fracture of Polymers
MECH	5410	Advanced Mechanical Behaviour of Materials
MECH	5430	Thermodynamics and Kinetics of Materials
MECH	5480	Nanocomposite Science and Technology
MECH	5930	Finite Element Methods

2. Students are required to complete 3 credits of extra-disciplinary common course(s). These are 5000-level courses designed and offered by the HKUST Fok Ying Tung Graduate School.

Postgraduate Seminar

3. Students are required to attend a research seminar course offered by any departments of the School of Engineering (e.g. CENG 6800, CIVL 6050, CIVL 6060, MECH 6090) for one term when they are studying in Clear Water Bay campus.
4. Students should register an attendance rate of at least 50% in one Nansha Campus Seminar Series when they are studying in Nansha campus.
5. Students are required to present at least once in a seminar in the Nansha Campus Seminar Series.

Language Requirements

6. Students are required to take and pass LANG 5001 Postgraduate English for Academic Purposes. The one credit earned from LANG 5001 cannot be counted toward the credit requirements.

MPhil Thesis

7. FYTG 6990 MPhil Thesis Research
8. Presentation and oral defense of the MPhil thesis.