

**City University of Hong Kong
Course Syllabus**

**offered by
Department of Mechanical Engineering
with effect from Semester A 2022 / 23**

Part I Course Overview

Course Title:	<u>Project Development Study</u>
Course Code:	<u>MNE6022</u>
Course Duration:	<u>1 semester</u>
Credit Units:	<u>3 credits</u>
Level:	<u>P6</u>
Medium of Instruction:	<u>English</u>
Medium of Assessment:	<u>English</u>
Prerequisites : <i>(Course Code and Title)</i>	<u>Nil</u>
Precursors: <i>(Course Code and Title)</i>	<u>Nil</u>
Equivalent Courses: <i>(Course Code and Title)</i>	<u>MBE6022 Project Development Study</u>
Exclusive Courses: <i>(Course Code and Title)</i>	<u>Nil</u>

Part II Course Details

1. Abstract

The aim of the course is to develop the student's ability to carry out project development study in chosen subject area related to advanced technology systems / mechanical engineering / bio-medical engineering. It will enable students to:

- develop skills of formulating a project work including strategy plan, team work and project management;
- establish a Research & Development (R & D) proposal for meeting defined requirements.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Understand the scope and nature of a research and development work, and the process of investigation.		✓	✓	✓
2.	Establish a research and development proposal based on the selected engineering topic.		✓	✓	✓
		N. A.			

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.			Hours/week (if applicable)
		1	2	3	
Lecture	Large class activities mainly include lectures, and small group activities comprise of case studies in groups.	✓	✓	✓	1 hr/week
Tutorial	The activities will be taken place in an integrated manner in the tutorials.	✓	✓	✓	2 hrs/week

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.			Weighting	Remarks
	1	2	3		
Continuous Assessment: 100%					
Mini-Projects	✓	✓	✓	100%	
				100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
Mini-projects	1. Ability to establish research & development proposal 2. Capability to apply the theory of knowledge and demonstrate appropriate judgment in the planning, design and technical functions of the project deliverables	High	Significant	Moderate	Not even reaching marginal levels

Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Mini-projects	1. Ability to establish research & development proposal 2. Capability to apply the theory of knowledge and demonstrate appropriate judgment in the planning, design and technical functions of the project deliverables	High	Significant	Moderate	Basic	Not even reaching marginal levels

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

Project development, professional skill, strategy, team work, project management, seminars and technical talks, cooperative and action learning, proposal development, and oral presentation

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

N. A.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

N. A.

Online Resources:

The students need to read technical papers and/or books based on respective project study.

Remarks:

If student takes both MNE6022 Project Development Study and MNE6008 Dissertation, the student may further pursue the case topic explored in the former course by substantially enhancing the study with new and advanced research work towards achieving the project objectives.