# City University of Hong Kong Course Syllabus

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

Part I Course Over	view
Course Title:	Research Seminar
Course Code:	MNE8002M
Course Duration:	To be completed normally in 1 academic year or 2 semesters
Credit Units:	2
Level:	<u></u>
Medium of Instruction:	English
Medium of Assessment:	English
<b>Prerequisites</b> : (Course Code and Title)	Nil
<b>Precursors</b> : (Course Code and Title)	Nil
<b>Equivalent Courses:</b> (Course Code and Title)	MBE8002M Research Seminar
<b>Exclusive Courses</b> : (Course Code and Title)	MBE8009/MNE8009 Research Methodology

### Part II Course Details

#### 1. Abstract

The Research Seminars will be used as a forum for the research students to:

- broaden their knowledge and expertise;
- exchange learning experiences or research findings with their peers;
- cultivate critical thinking and stimulate generation of new ideas;
- develop their ability and skill in technical communications; and
- help promote their research culture.

#### 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.	Define the nature, aim, scope and significance of a research			$\checkmark$	
	topic clearly in explicit terms and develop it in adequate				
	academic depth and vigour.				
2.	Review the body of knowledge from literature to lay the		$\checkmark$	$\checkmark$	
	necessary theoretical foundation relevant to the topic or				
	theme of the thesis.				
3.	Apply such theory or knowledge to formulate and			$\checkmark$	
	implement the research methodology for the thesis.				
4.	Participate in the regular seminars in the course of their			$\checkmark$	
	candidature.				
	Communicate the thesis research process, results and				
	experience scholarly and logically, using written, oral and				
	visual media.				
* If we	ighting is assigned to CILOs, they should add up to 100%.	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.)

Students are required to attend the regular Seminars in the course of their candidature. The candidates are expected to learn and gain from these seminars during which they are encouraged to have scholarly discourse about methodology design, research technique and instrument, analysis strategies, and research progress or findings with their peers. These seminars are progress checkpoints as well as forums for sharing of research experience among the students.

Research seminars and talks by guest speakers/visitors, will also be arranged throughout the program. In addition, students are encouraged to attend other seminars organized on a regular basis by different academic units of CityU. This will provide students with opportunities for first-hand discussions and interaction with experienced professionals and academics on wide ranging contemporary issues and topics.

#### 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	4		
Continuous Assessment:	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	100%	
Examination: 0%						
					100%	

A registered student has to meet the minimum requirements of attendance (at least 26 seminar hours), presentation and report for completion of the course.

\* Note: This course will be offered outside Hong Kong. However, seminar attendance and presentation conducted on CityU campus will be counted towards the fulfillment of this course.

#### 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	Good	Marginal	Failure
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)
Research Seminar	Quality of presentation about the research progress or results to peers and faculty in class. Quality of the submitted portfolio (as defined each semester) of brief write-ups and reflections of the research seminars attended.		Significant	Moderate	Not even reaching marginal levels

## Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
Research Seminar	Quality of presentation about the research progress or results to peers and faculty in class. Quality of the submitted portfolio (as defined each semester) of brief write-ups and reflections of the research seminars attended.		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.)

Literature search, research design, research methodology, quantitative and qualitative methods, research writing and presentation, research seminars.

#### 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.)

Nil

#### 2.2 Additional Readings

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

Experimental Methods for Engineers, McGraw-Hill Series in Mechanical Engineering, 8th Edition, Jack Holman.

Professional and Technical Writing/Presentations, Wikibooks: https://en.wikibooks.org/wiki/Professional\_and\_Technical\_Writing/Presentations.

#### **Online Resources**

Online learning material is provided via University computer network.