# City University of Hong Kong Course Syllabus

## offered by School of Energy and Environment with effect from Semester A 2024/25

## Part I Course Overview

Course Title:	Dissertation
Course Code:	SEE6999
<b>Course Duration:</b>	Two semesters (Sem A, Sem B or Summer Term)
Credit Units:	6 credits
Level:	P6
Medium of Instruction:	English
	8
Medium of Assessment:	English
Prerequisites:	
(Course Code and Title)	Nil
Precursors:	
(Course Code and Title)	Nil
Equivalent Courses:	
(Course Code and Title)	Nil
Exclusive Courses:	
(Course Code and Title)	Nil

### Part II Course Details

#### 1. Abstract

The aim of the dissertation is to give the opportunity to students to demonstrate their ability to carry out an independent piece of research and development work, and to develop expertise in a chosen subject area related to the program through the application of theory and techniques provided by the program. This will take the form of a substantial study in a subject area related to energy and environment, largely through the exercise of independent inquiry. In undertaking the dissertation, the student should be able to demonstrate ability to exercise judgment, independent thought, initiative, intellectual achievement, understanding of the chosen subject matter, and the principles being applied. The student will also develop and demonstrate the ability to manage and present the dissertation in a precise and coherent manner.

## 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	Discov	very-en	riched
		(if	curricu	ılum re	lated
		applicable)	learnir	ng outco	omes
			(please	e tick	where
			approp	oriate)	
			A1	A2	A3
1.	Carry out a literature survey or search of a selected subject, plan the entire project and integrate the materials principles into the project selected.	20%	<b>√</b>	<ul> <li>✓</li> </ul>	
2.	Carry out independent research and development work, analyze and interpret data professionally.	40%	~	~	✓
3.	Demonstrate initiative, innovative abilities, and critical thinking. Be able to write a good dissertation and present scientific findings orally.	40%	<b>√</b>	<b>√</b>	
		100%			

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 real-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.** Learning and Teaching Activities (LTAs)

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

LTA	Brief Description	CILO No.		Hours/week	
		1	2	3	(if applicable)
Meeting with	Regular scheduled meeting with	$\checkmark$	✓	✓	
Primary	Primary Supervisor to guide				
Supervisor	student with the learning of				
_	fundamentals in the research				
	topic and develop hypotheses				

Survey and analytical work	Hands-on work by the student to put the fundamental knowledge into experimental practice and to verify hypotheses	✓	✓		
Report writing	Scientific writing and professional presentation of written document			✓	
Presentation	Oral presentation to disseminate research findings			✓	

#### 4. Assessment Tasks/Activities (ATs)

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

The progress of the dissertation will be closely monitored through regular meetings between the dissertation supervisor and the student.

The oral presentation is assessed by a team of assessors, appointed by the dissertation committee, according to style, structure and clarity, and response to questions. The assessment procedures are arranged to incorporate a uniformity of treatment across the student cohort.

Each dissertation report is assessed by the assessor appointed by the project committee to each particular dissertation. The report is assessed as to presentation (clarity, conciseness), technical knowledge and understanding, and accomplishment (technical competence, initiative creativity, effort).

Assessment Tasks/Activities	CILO No.			Weighting	Remarks	
	1	2	3			
Continuous Assessment: 100%						
Interim report	✓			10%		
Written dissertation	$\checkmark$	$\checkmark$	$\checkmark$	75%		
Oral presentation			$\checkmark$	15%		
Examination: 0% (duration: , if applicable)						
				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 before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Interim report	Ability to perform initial survey of theoretical background in relevant research topic and building hypothesis around the topic	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Dissertation	Ability to describe relevant theoretical background and how the principles are applied to technology and management for solving energy and environment issues.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to demonstrate original intellectual thinking.					
3. Oral presentation	Ability to convey research findings orally in a convincing and systematic manner	High	Significant	Moderate	Basic	Not even reaching marginal levels

## Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

Assessment Task	Criterion	Excellent	Good	Marginal	Failure
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)
1. Interim report	Ability to perform initial survey of theoretical background in relevant research topic and building hypothesis around the topic	High	Significant	Basic	Not even reaching marginal levels

2. Dissertation	Ability to describe relevant theoretical background and how the principles are applied to technology and management for solving energy and environment issues. Ability to demonstrate original intellectual thinking.	High	Significant	Basic	Not even reaching marginal levels
3. Oral presentation	Ability to convey research findings orally in a convincing and systematic manner	High	Significant	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.)

There is no fixed formal syllabus. Students will be required to undertake individually supervised research and a dissertation. A departmental publication is provided giving details of requirements, timing, and considerations necessary for the successful completion, on time, of the course.

## 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.)

To be advised by individual supervisor based on the topics of research.

#### 2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.) Refer to attached Guidelines to SEE 6999 Dissertation.