

**City University of Hong Kong  
Course Syllabus**

**offered by Department of Electrical Engineering  
with effect from Semester A in 2024/2025**

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**Part I Course Overview**

<b>Course Title:</b>	Advanced Topics in Engineering I
<b>Course Code:</b>	EE6450
<b>Course Duration:</b>	One Semester (13 weeks)
<b>Credit Units:</b>	3
<b>Level:</b>	P6
<b>Medium of Instruction:</b>	English
<b>Medium of Assessment:</b>	English
<b>Prerequisites:</b> <i>(Course Code and Title)</i>	To be prescribed by the visiting scholar or the course lecturer
<b>Precursors:</b> <i>(Course Code and Title)</i>	Nil
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	Nil
<b>Exclusive Courses:</b> <i>(Course Code and Title)</i>	Nil

## Part II Course Details

### 1. Abstract

This course aims to provide students with an opportunity to study advanced engineering subjects presented by visiting scholars with expertise in the area of Electronic Engineering and Information Technology.

### 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 and analyze the engineering problems in the selected areas.		✓		
2.	Describe the technology in the selected areas.		✓	✓	
3.	Apply the selected advanced technology to solving problems.		✓	✓	✓
		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 (if applicable)
		1	2	3				
Lectures	Students will participate in lectures where they will learn various fundamental knowledge and concepts in advanced topics of engineering.	✓	✓	✓				3 hrs/ wk (Some of the lectures will be conducted in the laboratory as case studies, demonstrations and experiments)
Laboratory experiments	Students will engage in lab sessions designed to reinforce selected key concepts covered in lectures, enabling them to apply theoretical knowledge through hands-on practice and case study.		✓	✓				

### 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: 50%								
Tests	✓	✓	✓				30%	
Assignments (least 3 times)	✓	✓	✓				20%	
Examination: 50% (duration: 2hrs , if applicable)								
Examination	✓	✓	✓				50%	
							100%	

#### Remark:

To pass the course, students are required to achieve at least 30% in course work and 30% in the examination.

## 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. Examination	Achievements in CILOs	High	Significant	Moderate	Basic	Not even reaching marginal level
2. Coursework	Achievements in CILOs	High	Significant	Moderate	Basic	Not even reaching marginal level

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B,)	Marginal (B-, C+, C)	Failure (F)
1. Examination	Achievements in CILOs	High	Medium	Low	Not even reaching marginal level
2. Coursework	Achievements in CILOs	High	Medium	Low	Not even reaching marginal level

## 6. Constructive Alignment with Programme Outcomes

PILO	How the course contribute to the specific PILO(s)
1, 2, 3	The course provides students with opportunities to study advanced engineering subjects presented by visiting scholars with expertise in areas of selected topics.
4, 5	Students are required to complete assignments to gain experience in a design study, a programming exercise, a design simulation exercise, or an empirical study in a commercial environment, in areas of selected topics.

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

#### 1. Keyword Syllabus

The syllabus will depend on the topic offered for this course, but the following arrangements must be adhered to:

- 1.1 The intended syllabus shall be available by the last week of previous semester to allow students to be informed of the topic.

#### 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.)*

1.	Designated research papers in the field of the advanced topics in engineering for case study purpose.
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##### 2.2 Additional Readings

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

1.	Additional topical papers in the field of the advanced topics in engineering for case study purposes.
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