# City University of Hong Kong Course Syllabus

# offered Department of Electronic Engineering with effect from Semester $\underline{A}$ in 2016/2017

W
Dissertation
EE6680
Part-time mode(EE6680): minimum 3 consecutive semesters/terms,
maximum 5 consecutive semesters/terms Full-time mode(EE6680D): minimum 2 consecutive semesters/terms, maximum 4 consecutive semesters/terms
This is a dissertation-type course as defined in City University's Academic Regulations (AR 12.5). The maximum duration of the course is 5 consecutive semesters/terms for Part-time mode and 4 consecutive semesters/terms for Full-time mode, after which no further extension can be permitted. As set out
in City University's Academic Regulations, Dissertation-type courses are not allowed to repeat.
9
P6
English
English
12 Credit Units of MSc elective courses and CGPA 2.5 or above; or equivalent
Nil
Nil
EE6691 Applied Research Internship Scheme in Electronic Engineering, EE6611 Directed Studies for Taught Postgraduate Students

#### **Part II Course Details**

#### 1. Abstract

The aim of the dissertation is to provide students with an opportunity to integrate and apply what has been learnt in the taught courses to complete a specialist project to develop their initiative, interests, and individual thinking via discovery learning. After the completion of the dissertation, the students should have a deeper understanding on the specialist area.

#### 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	ery-eni	riched
		(if	curricu	ılum rel	lated
		applicable)	learnin	g outco	omes
			(please	e tick	where
			approp	riate)	
			A1	A2	A3
1.	Organise and manage a substantial individual design project.		✓	✓	
2.	Demonstrate the ability to work independently with		✓	✓	
	professionalism in successfully completing project				
	assignments.				
3.	Demonstrate initiative, innovative and intellectual abilities in		✓	✓	✓
	handling a technically challenging applied research project.				
4.	Disseminate results of what they leant in the course both in a		✓	✓	✓
	formal report and an oral presentation.				
		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 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		
		1	2	3	4		(if
							applicable)
Laboratory	Lab sessions with hand-on experiment in design and completion of a selected specialist area to the dissertation.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		
Dissertation	Dissertation on a selected specialist area to the dissertation.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>		

A supervisor of the proposed project will be assigned to each student by the Head of Department. The supervisor(s) is/are responsible for guiding and overseeing the project work of the student on an individual basis. A student is expected to discuss with his/her supervisor at regular intervals. He/She will carry out a literature search and formulate a preliminary project planning. However, the student may require carrying out software and/or hardware implementation according to the nature of the project.

#### 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: 100%							
Presentation	✓	✓	✓	✓		20%	
Dissertation	✓	✓	✓	✓		80%	
Examination: <u>0%</u> (duration: , if applicable)							
						100%	

#### Remark:

A dissertation on his/her project has to be submitted to the Department (3 copies) by each student and the final assessment takes place 4 weeks afterward.

Assessment of the project will be based upon the following components:

- (i) quality and content of dissertation
- (ii) performance in oral presentation

As a guide, the assessment weighting given to each of the above components would normally be as follows:

Dissertation 80% Oral presentation 20%

The assessment process will take the form of an oral presentation and examination exercise, and will be carried out by an assessment panel appointed by Head of Department and comprised of a chairman, an assessor and the project supervisor. The Chairman will moderate the assessment process while the assessment panel will generate a single assessment mark for each project. In the event of a disagreement between supervisor and assessor on the assessment mark, the chairman shall arbitrate.

In addition, a dissertation committee which consists of a chairman (the Programme Leader), Department Head's nominee and representatives from specialist subject areas will carry out an overall moderation of the marks awarded by the assessment panel.

The assessment pattern for the course is 100% coursework. There are no formal lectures for this course. Students are required to undertake individually supervised research.

# 5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Adequate (C+, C, C-)	Marginal (D)	Failure (F)
1. Coursework	Achievements in CILOs	High	Significant	Moderate	Basic	Not even reaching marginal level

# 6. Constructive Alignment with Programme Outcomes

PILO	How the course contribute to the specific PILO(s)						
1, 2, 3, 4, 5	The course provides students with amble opportunities in acquiring knowledge						
	and evaluation of new technologies in the chosen areas of project works, and also						
	the applications of mathematics and engineering problem solving skills which are						
	central to the aims of this program.						
6, 7	Students are required to complete a formal report, demonstrate and present their						
	project works. Students will also acquire project management skills and develop						
	sense of financial viability for the project.						

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

#### 1. Keyword Syllabus

The projects will be drawn from available staff expertise, with emphasis being placed on a practical design implementation. Due attention must be paid to cost effectiveness, manufacturing and testing problems. A thorough discussion of alternative design strategies is expected as an integral part of the dissertation.

#### 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.)

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	1.	As designated by supervisors

#### 2.2 Additional Readings

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

1.	The project supervisor shall recommend relevant books, publications and reference materials prior to
	the commencement of the project.