City University of Hong Kong
Course Syllabus

offered by Department of Systems Engineering & Engineering Management
with effect from Semester A 2017 / 18

Part I Course Overview

Course Title:	Advanced Research Topics
Course Code:	SEEM8010
Course Duration:	Normally to be taken during Year 2-3 of full-time PhD candidature
Credit Units:	3 (1 CU per semester for 3 semesters of PhD candidature)
Level:	R8
Proposed Area: *(for GE courses only)*	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☐ Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	MEEM8009 (offered until Semester A 2011/12) / SEEM8009 Research Methodology
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	MEEM8010/MBE8010 Advanced Research Topics
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

This course aims to provide PhD students with formal forums for the doctoral students to –

- further broaden their research knowledge and expertise; so as the skills on literature search
- learn about the recent advancement in ME and EM research and methodologies
- present their research findings and discuss their learning experiences with their peers and academic staff
- further strengthen their research mindset and scholarship and the research culture in the department.

These formal forums are in the form of regular Research Seminars which offer a cooperative learning environment in which PhD students from different cohorts and research themes can mix, interact, challenge and support each other during the very important formative years of their doctoral candidature.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs[#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Broaden their knowledge on literature search and expertise beyond their PhD research topic	20%	✓		
2.	Extend their understanding of the latest trends and important developments in ME, IE and EM research and methodologies	30%		✓	
3.	Communicate with fellow peers regarding their own or others' research findings and experience scholarly and logically	50%		✓	✓
		100%			

** If weighting is assigned to CILOs, they should add up to 100%.*

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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)

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
Seminar	Seminar/presentation by fellow students and department visitors.	✓	✓				
Presentation	Students giving presentation with question answer session.	✓		✓			

Regular weekly research seminars will be organized by the SEEM Department during the semester.

Each full-time PhD student is required to attend at least 24 of these research or technical seminars during their year 2 and 3 of their PhD candidature i.e. for full-time PhD students, nominally 8 seminars per semester for 3 semesters. (Part-time PhD students may be permitted to take up to three years of PhD candidature to fulfill this requirement.)

Apart from the SEEM research seminars, PhD students can also attend other officially sanctioned research or technical seminars held at CityU or other universities/professional institutions like HKIE, IIE, IEE, and IEEE. Participation in a relevant full-day technical workshop is equivalent to the attendance of 4 research seminars.

In addition, each PhD student has to present at least twice the research progress or results to peers and faculty in these formal research seminars to meet the course requirements.

Each student is required to submit a portfolio of brief write-ups and reflections of the research seminars attended and presented.

Each student's portfolio is to be submitted to the qualifying panel via his/her supervisor for verification at the end of each semester.

4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.					Weighting*	Remarks
	1	2	3	4	5		
Continuous Assessment: 100 %							
Coursework	✓	✓	✓			100%	
Examination: 0 % (duration: Hours , if applicable)							
** The weightings should add up to 100%.*						100%	

5. Assessment Rubrics

Assessment Task	Criterion
1. Coursework	The portfolio is a collection of critiques and reflections of the research seminars attended and presented. The assessment of the portfolio includes the student's qualifying panel's evaluation of the candidate's research seminar presentations.

- 100% coursework. Pass or Fail.

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

1. Keyword Syllabus

Research design, research methodology, research progress, seminar attendance and presentation.

2. Reading List

2.1 Compulsory Readings

1.	Paul Leedy and Jeanne Ormrod, Practical Research (7th edition), Merrill Prentice Hall, 2001
2.	Rowena Murray, How to Write a Thesis, Open U Press, 2002
3.	Wayne C Booth et al, The Craft of Research, Publ. Chicago U Press, 1995

2.2 Additional Readings

NIL