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:	Dissertation
Course Code:	SEEM6018
Course Duration:	Normal duration: 2 Semesters (Part-time student) 1 Semester + Summer Term (Full-time student) This is a dissertation-type course as defined in City University's Academic Regulations for Taught Postgraduate Degrees (AR12.4). The maximum duration of the course is 5 semesters, after which no further extension can be permitted. As set out in City University's Academic Regulations, dissertation-type courses cannot be repeated.
Credit Units:	9
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Students must complete a total of not less than 12 CU AND obtained a minimum CGPA of 2.7 before taking the Dissertation. The student's Dissertation Proposal needs to be recommended by the proposed Dissertation Supervisor and approved by the Dissertation Committee.
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	MEEM6018 Dissertation
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

The MSEM Dissertation offers an MSEM student a rewarding and enriching opportunity to propose, formulate and carry out an independent research topic or project of his/her choice within the area of engineering management. The MSEM Dissertation is an integrative course that allows a student to explore, evaluate and apply the theories and techniques learned from the various taught courses of the MSEM programme to a real life project or industrial setting.

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 importance of a selected engineering management dissertation topic clearly in explicit terms.	20%	✓	✓	
2.	**Review** the body of knowledge from selected literature to deepen the understanding of the theory or practice relevant to the chosen dissertation.	30%		✓	
3.	**Apply** such theory or knowledge to formulate and implement the methodology for the chosen dissertation.	40%		✓	✓
4.	**Communicate** effectively the dissertation process, results, experience and reflection coherently and logically, using written, oral and visual media.	10%	✓	✓	
		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 (if applicable)
		1	2	3	4	
T1	Each student shall define, under the supervision of a Dissertation supervisor, the nature, aim, scope and importance of a project relevant to engineering management.	✓				
T2	Each student shall research and review the appropriate body of knowledge and background information needed to achieve the defined Dissertation objective(s).	✓	✓			
T3.1	Each student shall appraise and select the knowledge, theory or practice learned from literature and develop the appropriate Dissertation methodology.		✓			
T3.2	Implement the methodology to the chosen engineering management problem or project.		✓	✓		
T3.3	Analyse the results obtained, draw conclusion and critically appraise the work done.		✓	✓	✓	
T4.1	Document the Dissertation process, results, experience and reflection in the form of MSEM Dissertation according to the given format.				✓	
T4.2	Make oral presentation and defence of the Dissertation endeavour and outcome when required.				✓	

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 %						
Written dissertation	✓	✓	✓	✓	100%	Attached below-Assignment Pattern
Examination: ___ % (duration: , if applicable)						
					100%	

Assessment Pattern:

100% Coursework

Grading pattern: Standard (A+AA-...F) according to the following scale:

Grades	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Marks %	>85	80-85	76-79	70-75	64-69	59-63	54-58	49-53	44-48	40-43	<40

CILO	TLA	Assessment Outcome Template					Weight
		Fail 0-39%	**Pass 40-54%**	**Satisfactory 55-69%**	**Good 70-84%**	**Very Good 85-100%**	
C1	**T1**	Project significance unrecognizable, aim/objectives and scope ill-defined	Marginally sufficient evidence of project significance and definition of project aim/objectives and scope	Sufficiently clear evidence of project significance and definition of project aim/objectives and scope	Clear evidence of project significance and definition of project aim/objectives and scope	Very convincing evidence of project significance and very clear and coherent definition of project aim/objectives and scope	**10%**
C2*	**T2**	Hardly any evidence of literature enquiry	Moderate literature review and adequate understanding	Satisfactory literature review and understanding	Good literature review and evidence of good understanding of key literature	Very good literature review and evidence of very good understanding of key literature	**20%**
C3*	**T3.1**	Hardly any appraisal or use of literature in support of methodology development	Moderate literature support and basic methodology development	Satisfactory literature support in methodology development	Good literature support in methodology development	Very good literature support in methodology development	**15%**
	T3.2	Methodology unrecognizable	Marginally adequate methodology	Adequate methodology	Good methodology, well implemented	Exemplary methodology, very well implemented	**15%**
	T3.3	Poor, incoherent, unclear analysis; unable to draw sensible conclusion	Marginally adequate analysis, discussion of results and conclusion	Satisfactory analysis, discussion of results and meaningful appraisal and conclusion	Good logical analysis, clear discussion of results, convincing appraisal and conclusion	Very methodical analysis, very convincing discussion of results, appraisal and conclusion	**15%**

C4	**T4.1**	Poor documentation, incomplete or poorly structured	Adequate documentation, comprehensible	Satisfactory documentation, coherent and well structured	Good documentation, very well structured with few deficiencies	Exemplary documentation, complete, professional or scholarly	**25%**
	T4.2	Poor presentation, incoherent, unclear; unable to answer questions satisfactorily	Adequate presentation and answers to questions	Satisfactory presentation, evident of fair understanding in response to questions	Clear presentation, well delivered, evident of good understanding in response to questions	Impressive presentation, completely clear and very persuasive	**Pass / Fail**

** Note: For a Dissertation that is principally based on survey study and critique of literature, the intended learning outcomes C2 and C3 and their corresponding T2 and T3s may be assessed together.*

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-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Written dissertation	See Assessment Outcome Template	High	Significant	Moderate	Basic	Not even reaching marginal levels

Assessment Process:

The submitted written Dissertation is assessed by the Supervisor (and any Co-Supervisor) and another independent Assessor. A student may be asked to make an Oral Defence of the Dissertation work in the presence of a Dissertation Committee nominee, the Supervisor, the Assessor and any Co-Supervisor.

After a written Dissertation has been assessed to be satisfactory, a student must submit two bound copies of his/her final Dissertation and a softcopy on disk to the Dissertation Committee via his/her Supervisor. In general, equal weighting would be given to the Supervisor's and the independent Assessor's assessments. The Dissertation Committee shall resolve any major discrepancies between the assessments made by Supervisors and Assessors.

Teaching Pattern:

There are no formal lectures for this course. Students are required to undertake individually supervised research.

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.)

Independent research. Individually chosen dissertation topic. Application and integration of theories, techniques and practices of selected topic in engineering management.

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.)

NIL