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:	Industrial Case Study
Course Code:	SEEM6045
Course Duration:	One Semester
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Nil **(Special approval by the SEEM 6045 Course Examiner is required)**
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	MEEM6045/MBE6045 Industrial Case Study
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

The course aims to expose students to mainstream research and/or investigation methods for tackling practical engineering or engineering management problems in the real-life environment and developing feasible solutions for these specific problems.

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 problem(s) and **conduct analysis** of causes	10%	✓		
2.	**Distinguish** various research methodologies and **select** the appropriate method(s) for the problem(s) at hand	20%		✓	
3.	**Define** the scope and the nature of project work	20%		✓	
4.	**Formulate** project proposals and **implement** the plan within a specific time span	40%		✓	
5.	**Monitor** project progress, **report** project outcomes and **evaluate** project success	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	5	
Students visit the company sponsoring the project and discuss with industrial supervisor(s) to learn about the problem and its context. Library research should be conducted simultaneously to identify similar problems and their solutions.	Establishing the individual / company context of the proposed study.	✓					
Students will identify relevant methodologies for solving the problems and list the merits of each of them. Students report to academic supervisor and industrial supervisor and justify their choice.	Development of methodology through selected literature study and under the guidance of supervision.		✓				
Students will start an industrial attachment at the industrial supervisor's company (i.e., sponsor) and implement their proposal.	Implementation of the methodology in selected industrial/ company setting under the guidance of company sponsor and CityU supervision.			✓	✓		10 weeks
Students will prepare a written report which summarizes their findings and conduct an oral presentation at the end of the industrial attachment.	Written report and oral presentation of completed industrial case study.					✓	

Student are required to undertake an individually supervised project, which includes formulating a project proposal, defining deliverables, making recommendations, implementing solutions and reporting final results.

There are no formal class activities such as regular lectures or tutorials. Consultation sessions with academic supervisors will be scheduled based on each student's individual progress.

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	5		
Continuous Assessment: 100 %							
Preparatory work will not be graded. (However, thorough preparation is often the industrial supervisor's primary consideration for approving the student to start his/her industrial attachment.)	✓	✓	✓			0%	
Discussion with and feedback from Industrial Supervisor (and other supervisory staff at the sponsor's company)				✓		50%	
Final Presentation					✓	50%	
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.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Continuous Assessment	Students must work closely with supervisor to develop and implement the industrial case project	High	Significant	Moderate	Basic	Not even reaching marginal levels

There will be no final examination in this course. A process of continuous assessment, including company visits by academic supervisors, feedback provided by industrial supervisor and other supervisory staff, periodic reports of project progress, final reports and oral presentation of findings – will be used to monitor and evaluate each student's learning outcome.

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.)

NIL

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.	There are no textbooks for this course. Reading assignments will be provided by the academic supervisor and the industrial supervisor of each project.

2.2 Additional Readings

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

NIL