

**City University of Hong Kong
Course Syllabus**

**offered by Department of Marketing
with effect from Semester B 2020/21**

Part I Course Overview

Course Title:	Marketing Engineering
Course Code:	MKT6615
Course Duration:	Intensive Teaching Mode / One Semester
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	MKT5610 Marketing Strategy and Planning MKT5612 Applied Marketing Research
Precursors: (Course Code and Title)	Nil
Equivalent Courses: (Course Code and Title)	Nil
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

This course aims to provide students with an understanding of the role of analytical techniques and computer models in enhancing marketing decisions in modern enterprises. Successful examples of marketing engineering as well as a software toolkit for the decision-making process will be provided. Ethics in marketing decision making will be emphasized. The focus is to foster and enhance students' skills in making IT-intensive marketing decisions.

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 how analytical techniques and computer models can enhance decision-making by converting data and information to insights and decisions		✓		
2.	Master the skills to employ a software toolkit and apply the models and methods taught in the course to real marketing decision problems			✓	
3.	Measure the profitability of marketing decisions			✓	
4.	Able to conduct teamwork and suggest a solution to marketing problems, and to communicate with group members and to the other stakeholders outside of the group				✓
5.	Understand how to make marketing decisions with social responsibility and high standards for ethics		✓		
		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	
Lectures	Important knowledge of the role of analytical techniques and computer models in enhancing marketing decision in modern enterprises will be explained and delivered through lectures. Ethics-related issues are discussed throughout all lectures.	✓	✓	✓	✓	✓	
Computer Lab Sessions	Application of the software tools will be demonstrated and actual hands-on discovery-based experience will be provided for students to master the skills in employing the tools and models in analytical analysis of marketing situation and problems.	✓	✓	✓	✓	✓	
Group Project Report	The class will form self-selected groups of a suitable number of members during the first week of class. Each group will have to complete a group term project. Group members must work jointly to prepare the report and presentation. The objective of the term project is to provide students with an opportunity to discover a real marketing issue that is of interest to them, and apply what they have learnt in class to demonstrate how well they have mastered the skills learned and how to apply high standards of business ethics in decision making. The students can select a project topic of their own interest and then choose or develop a model to address the specific marketing decision involved. Students may decide to work on a project that involves one of the software tools not covered in class.	✓	✓	✓	✓	✓	
Group Project Presentations	During the final sessions of the semester, each group will make a presentation to the entire class as one of the discovery accomplishments.	✓	✓	✓	✓	✓	
Homework	In-class or out-class assignments will be given to students to work on independently to discover issues and knowledge, and to improve their problem solving ability.	✓	✓	✓	✓	✓	
In-class Discussions	Class sessions will be devoted to probing, extending, and applying the material in the readings and the cases. It is the students' responsibility to be prepared for each session as detailed in the course outline. Each student is expected to contribute to class discussions.	✓	✓	✓	✓	✓	

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: 70%							
<u>Group Term Project Report</u> Students will work in groups on selected topics, where they can demonstrate how they can apply what they learned in class to solve business marketing problems.	✓	✓	✓	✓	✓	20%	
<u>Group Term Project Oral Presentation</u> Students will prepare and deliver presentations on their group projects.	✓	✓	✓	✓	✓	10%	
<u>In-class Discussion</u> Students need to participate in class discussions and activities and ask questions to facilitate their understanding of knowledge taught in class.	✓	✓	✓	✓	✓	10%	
<u>Individual Homework</u> Out-of-class assignments will be given to students throughout the semester to test their understanding of class material.	✓	✓	✓	✓	✓	30%	
Examination: 30% (duration: 2 hours, if applicable)							
<u>Examination</u> Students will be assessed via the examination for their understanding of concepts learned in class, textbooks, reading materials and their ability to apply subject-related knowledge.	✓	✓	✓	✓	✓	30%	
						100%	

Regulation of the course:

Students need to meet the attendance requirement of the Dept. of Marketing for the completion of the course.

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. Group Term Project Report	1.1 ABILITY to INTEGRATE major concepts of marketing engineering to marketing problems, and IDENTIFY the ways of defining, designing and conducting analytical marketing analysis	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.2 ABILITY to IDENTIFY the various process and procedures in analytical decision making.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.3 COMPETENCE to ANALYZE marketing data using software package.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.4 ABILITY to RECOMMEND solutions to a marketing problem based on the analysis of marketing data with EMPHASIS on business ethics.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.5 ABILITY to PRESENT and ORGANIZE information in a business report format.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Group Term Project Oral Presentation	2.1 ABILITY to present and communicate information in oral and electronic format	High	Significant	Moderate	Basic	Not even reaching marginal levels
	2.2 ABILITY to show coverage of contents and demonstrate time management skills	High	Significant	Moderate	Basic	Not even reaching marginal levels
	2.3 ABILITY to provide quality answers to questions raised in the presentation Q&A session.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. In-Class Discussion	3.1 ABILITY to show familiarity with key concepts and definitions.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	3.2 ABILITY to state critical points and make contributions of the assigned questions or problem	High	Significant	Moderate	Basic	Not even reaching marginal levels
	3.3 ABILITY to participate and equip with excellent presentation skills	High	Significant	Moderate	Basic	Not even reaching marginal levels

4. Individual Homework	4.1 ABILITY to show excellent analytic skills in solving marketing engineering problems.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	4.2 ABILITY to command critical discussing of the marketing engineering models and their applications, and the key roles of business ethics in marketing decisions.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	4.3 ABILITY to select, analyse and evaluate the analytical models used in marketing engineering	High	Significant	Moderate	Basic	Not even reaching marginal levels
	4.4 ABILITY to apply both managerial judgment and analytical approaches to current marketing problems and issues	High	Significant	Moderate	Basic	Not even reaching marginal levels
5. Examination	5.1 ABILITY to grasp of all aspects of the course, with the ability to integrate major concepts of marketing engineering to marketing problems.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	5.2 ABILITY to identify the various process and procedures in collecting and analyzing marketing data and the relevant methodologies used.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	5.3 ABILITY to apply course content in practical marketing situations and make decisions based on the output of marketing analytics.	High	Significant	Moderate	Basic	Not even reaching marginal levels

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.)

Marketing analysis and planning, computer-assisted marketing, analytical marketing, marketing decision models, market response models, marketing analytics, marketing science, decision modelling.

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.	Gary L. Lilien, Arvind Rangaswamy. And Arnaud De Bruyn., “Principles of Marketing Engineering and Analytics”, 3rd ed. DecisionPro, 2017. ISBN: 0-9857-6482-1.
----	---

2.2 Additional Readings

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

1.	Wayne L. Winston, “Marketing Analytics: Data-Driven Techniques with Microsoft Excel”, Wiley, 2014.
2.	Paul W. Farris, Neil T. Bendle, Phillip E. Pfeifer, & David J. Reibstein. <i>Marketing metrics: The definitive guide to measuring marketing performance</i> . 2010, 2nd Ed. Prentice Hall.
3.	Leeflang, Peter S.H. et al. <i>Building Models for Marketing Decisions</i> . 2000. Boston, MA: Kluwer.