

# MKT6614: ADVANCED MARKETING ANALYTICS

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## Effective Term

Semester B 2024/25

## Part I Course Overview

### Course Title

Advanced Marketing Analytics

### Subject Code

MKT - Marketing

### Course Number

6614

### Academic Unit

Marketing (MKT)

### College/School

College of Business (CB)

### Course Duration

One Semester

### Credit Units

3

### Level

P5, P6 - Postgraduate Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

MKT5610 Marketing Strategy and Planning

### Precursors

MKT5612 Applied Marketing Research

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course provides the skills needed to make intelligent use of marketing data in making recommendations about marketing strategies. These skills are learned through a combination of lectures, cases, and "hands-on" exercises with actual

business data. The course is designed to equip the student with practical "know how", which can be used immediately on the job. Students gain a working knowledge of qualitative methods, causal tests, linear regression for pricing optimization, logit model for accurate advertising targeting, Gabor-Granger model for freemium pricing, cluster tools for consumer segmentation and positioning, and an introduction to natural language processing and AI recommendations systems.

### Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Analyze theories and concepts associated with using databases to enhance marketing programs and build stronger relationships with customers and/or suppliers.	x		
2	Develop practical analytical skills (e.g., predictive modelling) in examining marketing databases so as to make sound marketing decisions.		x	
3	Create and design data-based marketing programs that can be integrated with company's marketing mix programs (e.g., targeting best prospects efficiently).			x
4	Work productively as part of a team, and in particular, communicate and coordinate team tasks effectively.		x	
5	Cultivate a strong sense of marketing ethics in designing and implementing data-based marketing programs.			x

#### 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 real-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.

### Learning and Teaching Activities (LTAs)

LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	The students need to learn how to apply concepts and information covered in the lectures to real-life situations.	1, 2, 3, 4, 5
2	Class Discussions/ Activities	Students will learn the practical skills through hands-on experience guided by the instructor in each class.	1, 2, 3, 4, 5

3	Projects	Students will complete one project, and provide brief written reports of their analyses and results.	1, 2, 3, 4, 5	
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**Assessment Tasks / Activities (ATs)**

	<b>ATs</b>	<b>CILO No.</b>	<b>Weighting (%)</b>	<b>Remarks (e.g. Parameter for GenAI use)</b>
1	Class Discussion & Participation Students need to come to class and participate actively in class discussions and exercises designed to facilitate their understanding of knowledge covered in class.	1, 2, 3, 4, 5	20	
2	Group Assignments Students are expected to work in a group to complete their assignments, including case-study analysis and data analysis.	1, 2, 3, 4, 5	30	
3	Group Project Students will be working on a group project in which they analyse a real dataset and make actionable marketing suggestions. Students need to form groups at the beginning of the semester and submit a progress report and at the end of the semester present their findings to the class.	1, 2, 3, 4, 5	20	
4	Final Project Students will be assessed via oral presentations and written reports for demonstrate their ability to identify concepts and develop analytical skills in examining marketing databases, and create data-based marketing programs	1, 2, 3	30	

**Continuous Assessment (%)**

### **Additional Information for ATs**

#### **Regulation of the course**

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

#### **Assessment Rubrics (AR)**

##### **Assessment Task**

Class Discussion & Participation (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

##### **Criterion**

Understanding the course materials.

Problem solving and case analysis skills

##### **Excellent**

(A+, A, A-)

1. Show excellent command of all aspects of the course, with the ability to describe concepts and applications in database marketing.
2. Demonstrate excellent ability to raise question and think critically.
3. Show excellent problem solving and case analysis skills.
4. Show wonderful attitude of team work and cooperation.
5. Attend over 90% of the classes.

##### **Good**

(B+, B, B-)

1. Show good coverage of most aspects of the course, with the ability to describe main concepts and applications in database marketing.
2. Demonstrate good ability to raise question and think critically.
3. Show good problem solving and case analysis skills.
4. Attend 80%-90% of the classes.
5. Active, contribute to team work keenly

##### **Fair**

(C+, C, C-)

1. Show fair command of all aspects of the course, with the ability to describe important concepts and applications in database marketing.
2. Demonstrate acceptable ability to raise question and think critically.
3. Show acceptable problem solving and case analysis skills.
4. Attend 70%-80% of the classes.
5. Active when prompt, contribute to team work reactively

##### **Marginal**

- (D) 1. Show marginal command of all aspects of the course, with the ability to describe basic concepts and applications in database marketing.
2. Demonstrate marginal ability to raise question and think critically.
  3. Show little problem solving and case analysis skills.
  4. Attend less than 70% of the classes.
  5. Occasionally active when urged

##### **Failure**

- (F) 1. Show no command of all aspects of the course, with the ability to describe basic concepts and applications in database marketing.
2. Demonstrate no ability to raise question and think critically.
  3. Show no problem solving and case analysis skills.
  4. Attend less than 70% of the classes.
  5. Not active when urged

### Assessment Task

Group Assignments (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

#### Criterion

Understanding the course materials.

Contribution to the teamwork

#### Excellent

- (A+, A, A-) 1. Show excellent command of concepts and applications in database marketing.  
2. Demonstrate excellent ability to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Enthusiastic, contribute to team work proactively.  
4. Excellent writing skills.

#### Good

- (B+, B, B-) 1. Show good command of concepts and applications in database marketing.  
2. Demonstrate good ability to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Active, contribute to team work keenly.  
4. Good writing skills.

#### Fair

- (C+, C, C-) 1. Show acceptable command of concepts and applications in database marketing. 2. Able to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Active when prompt, contribute to team work reactively.  
4. Acceptable writing skills.

#### Marginal

- (D) 1. Show marginal command of concepts and applications in database marketing.  
2. Able to apply some course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Occasionally active when urged.  
4. Poor writing skills.

#### Failure

- (F) 1. Show no command of concepts and applications in database marketing.  
2. Not able to apply some course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Not active when urged.  
4. Very Poor writing skills.
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### Assessment Task

Group project (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

#### Criterion

Understanding the course materials

Original thinking and creativity

#### Excellent

- (A+, A, A-) 1. Show excellent command and thorough understanding of allocated part.  
2. Demonstrate excellent ability of interpretation and integration.  
3. Strong evidence of original thinking with high degree of creativity.  
4. Enthusiastic, contribute to team work proactively in presentation session.

**Good**

- (B+, B, B-) 1. Show good knowledge of most aspects of the whole presented content and deep understanding of allocated part.  
2. Demonstrate good ability of interpretation and integration.  
3. Good evidence of original thinking with degree of creativity.  
4. Active, contribute to team work keenly in presentation session.

**Fair**

- (C+, C, C-) 1. Demonstrate acceptable command of all aspects of the whole presented content and reasonable understanding of allocated part.  
2. Demonstrate fair ability of interpretation and integration.  
3. Fair evidence of original thinking.  
4. Active when prompt, contribute to team work reactively.

**Marginal**

- (D) 1. Show marginal command of all aspects of the whole presented content and basic understanding of allocated part.  
2. Show marginal ability of interpretation and integration.  
3. Poor evidence of original thinking.  
4. Occasionally active when urged in presentation session.

**Failure**

- (F) 1. Show no command of any aspect of the whole presented content and poor understanding of allocated part.  
2. Show no ability of interpretation and integration.  
3. Very poor evidence of original thinking.  
4. Not active when urged in presentation session.

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**Assessment Task**

Final Project (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

**Criterion**

Apply theory and method to demonstrate managerial and analytical skills to current marketing problems and issues

**Excellent**

- (A+, A, A-) 1. Show excellent command of analyzing the customers  
2. Able to recognize important marketing concepts and their applications.  
3. Demonstrate excellent managerial and analytical skills to current marketing problems and issues.

**Good**

- (B+, B, B-) 1. Show good command of analyzing the customer  
2. Able to recognize most of the marketing concepts and their applications.  
3. Demonstrate good managerial and analytical skills to current marketing problems and issues.

**Fair**

- (C+, C, C-) 1. Show acceptable command of analyzing the customers  
2. Able to recognize some of the marketing concepts and their applications.  
3. Demonstrate acceptable managerial and analytical skills to current marketing problems and issues.

**Marginal**

- (D) 1. Show marginal command of analyzing the customers

2. Able to recognize a few marketing concepts and their applications.
3. Demonstrate marginal managerial and analytical skills to current marketing problems and issues.

### **Failure**

- (F) 1. Show poor command of analyzing the customers, competitors and other business environments independently.
2. Not able to recognize marketing concepts and their applications.
  3. Demonstrate poor managerial and analytical skills to current marketing problems and issues.
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### **Assessment Task**

Class Discussion & Participation (for students admitted from Semester A 2022/23 to Summer Term 2024)

### **Criterion**

Understanding the course materials;

Problem solving and case analysis skills

### **Excellent**

- (A+, A, A-) 1. Show excellent command of all aspects of the course, with the ability to describe concepts and applications in database marketing.
2. Demonstrate excellent ability to raise question and think critically.
  3. Show excellent problem solving and case analysis skills.
  4. Show wonderful attitude of team work and cooperation.
  5. Attend over 90% of the classes.

### **Good**

- (B+, B) 1. Show good coverage of most aspects of the course, with the ability to describe main concepts and applications in database marketing.
2. Demonstrate good ability to raise question and think critically.
  3. Show good problem solving and case analysis skills.
  4. Attend 80%-90% of the classes.
  5. Active, contribute to team work keenly

### **Marginal**

- (B-, C+, C) 1. Show fair command of all aspects of the course, with the ability to describe important concepts and applications in database marketing.
2. Demonstrate acceptable ability to raise question and think critically.
  3. Show acceptable problem solving and case analysis skills.
  4. Attend 70%-80% of the classes.
  5. Active when prompt, contribute to team work reactively

### **Failure**

- (F) 1. Show no command of all aspects of the course, with the ability to describe basic concepts and applications in database marketing.
2. Demonstrate no ability to raise question and think critically.
  3. Show no problem solving and case analysis skills.
  4. Attend less than 70% of the classes.
  5. Not active when urged
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### **Assessment Task**

Group Assignments (for students admitted from Semester A 2022/23 to Summer Term 2024)

### **Criterion**

Understanding the course materials;

Contribution to the teamwork

**Excellent**

- (A+, A, A-) 1. Show excellent command of concepts and applications in database marketing.  
2. Demonstrate excellent ability to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Enthusiastic, contribute to team work proactively.  
4. Excellent writing skills.

**Good**

- (B+, B) 1. Show good command of concepts and applications in database marketing.  
2. Demonstrate good ability to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Active, contribute to team work keenly.  
4. Good writing skills.

**Marginal**

- (B-, C+, C) 1. Show acceptable command of concepts and applications in database marketing.  
2. Able to apply course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Active when prompted, contribute to team work reactively.  
4. Acceptable writing skills.

**Failure**

- (F) 1. Show no command of concepts and applications in database marketing.  
2. Not able to apply some course content in practical situations and to assess the quality of database marketing applications by firms.  
3. Not active when urged.  
4. Very Poor writing skills.

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**Assessment Task**

Group project (for students admitted from Semester A 2022/23 to Summer Term 2024)

**Criterion**

Understanding the course materials;

Original thinking and creativity

**Excellent**

- (A+, A, A-) 1. Show excellent command and thorough understanding of allocated part.  
2. Demonstrate excellent ability of interpretation and integration.  
3. Strong evidence of original thinking with high degree of creativity.  
4. Enthusiastic, contribute to team work proactively in presentation session.

**Good**

- (B+, B) 1. Show good knowledge of most aspects of the whole presented content and deep understanding of allocated part.  
2. Demonstrate good ability of interpretation and integration.  
3. Good evidence of original thinking with degree of creativity.  
4. Active, contribute to team work keenly in presentation session.

**Marginal**

- (B-, C+, C) 1. Demonstrate acceptable command of all aspects of the whole presented content and reasonable understanding of allocated part.

2. Demonstrate fair ability of interpretation and integration.
3. Fair evidence of original thinking.
4. Active when prompt, contribute to team work reactively in presentation session.

**Failure**

- (F) 1.Show no command of any aspect of the whole presented content and poor understanding of allocated part.  
2.Show no ability of interpretation and integration.  
3.Very poor evidence of original thinking.  
4.Not active when urged in presentation session.
- 

**Assessment Task**

Final Project (for students admitted from Semester A 2022/23 to Summer Term 2024)

**Criterion**

Apply theory and method to demonstrate managerial and analytical skills to current marketing problems and issues

**Excellent**

- (A+, A, A-) 1.Show excellent command of analyzing the customers  
2.Able to recognize important marketing concepts and their applications.  
3.Demonstrate excellent managerial and analytical skills to current marketing problems and issues.

**Good**

- (B+, B) 1.Show good command of analyzing the customer  
2.Able to recognize most of the marketing concepts and their applications.  
3.Demonstrate good managerial and analytical skills to current marketing problems and issues.

**Marginal**

- (B-, C+, C) 1.Show acceptable command of analyzing the customers  
2.Able to recognize some of the marketing concepts and their applications.  
3.Demonstrate acceptable managerial and analytical skills to current marketing problems and issues.

**Failure**

- (F) 1.Show marginal command of analyzing the customers  
2.Able to recognize a few marketing concepts and their applications.  
3. Demonstrate marginal managerial and analytical skills to current marketing problems and issues.
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## Part III Other Information

**Keyword Syllabus**

Customer analytics, customer relationship management, segmentation and targeting, factor analysis, cluster analysis, conjoint analysis, RFM

**Reading List**

**Compulsory Readings**

Title	
1	Marketing Analytics, by Wayne L. Winston published by Wiley

**Additional Readings**

	<b>Title</b>
1	Strategic Database Marketing, by Arthur M. Hughes, published by McGraw-Hill.
2	Data Mining for Business Analytics, by Galit Shmueli, Peter C. Bruce, and Nitin R. Patel, published by Wiley