

MKT5652: ARTIFICIAL INTELLIGENCE FOR MARKETING

Effective Term

Semester B 2025/26

Part I Course Overview

Course Title

Artificial Intelligence for Marketing

Subject Code

MKT - Marketing

Course Number

5652

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

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Additional Information

Nil

Part II Course Details

Abstract

This course aims to help students achieve the core competencies that stem from a Discovery Enriched Curriculum (DEC) in a marketing context. Accordingly, the aims of the course are to facilitate students doing the following:

- Create new knowledge in Artificial Intelligence (AI) by building on their current functional knowledge and develop workable AI solutions for marketing applications.
- Develop critical thinking skills independently and collaboratively to create value via AI.
- Communicate, orally and in writing, their creative ideas and plans for implementing AI solutions to deal with marketing challenges and capture opportunities.
- Become life-long learners through the acquisitions of transferable skills, including application of AI principles and real-world knowledge, communication and oral as well as written language, teamwork and leadership, to enable them to work individually and in teams as they make challenging marketing decisions.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understand the foundations of AI, its benefits and risks and apply AI to create value in marketing.	20	x		
2	Understand how to create AI marketing applications with machine learning, deep learning, computer vision, natural language processing (NLP), generative AI, Retrieved Augmented Generation (RAG) and AI agent.	20		x	
3	Have ability to use AI for customer service (ChatBot), marketing communication development (text-to-image, text-to-voice, image-to-image, image-to-video, digital avatar), marketing forecast and prediction (time series) and other marketing applications.	20		x	
4	Apply knowledge developed to innovatively implement these AI marketing solutions for the greater benefit of the stakeholders, including the organization and its members.	40			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	Lectures	Equip students with knowledge about AI and related marketing topics. During the lectures, students will be expected to actively participate by responding to and answering questions and sharing their understanding and ideas.	1, 2, 3, 4	
2	Ideation Discussion	Equip students with knowledge about AI and related marketing topics. During the lectures, students will be expected to actively participate by responding to and answering questions and sharing their understanding and ideas.	1, 2, 3, 4	
3	Student Ideation Presentation	Students will work together in a group and give presentations of an ideation proposal in which they have to apply, communicate and demonstrate their AI knowledge, integration and analytical skills with a minimum viable product.	1, 2, 3, 4	
4	Peer Review	Students will comment on the Ideation Presentation of other students to develop their evaluation skills.	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Individual Assignments Three individual assignments for students to demonstrate with his/her own computer on how to use AI to perform three marketing tasks covered in lecture.	1, 2, 3, 4	30	-	Yes

2	Group Ideation Presentation Students working in teams will present their ideas using the Ideation Programme reference from Hong Kong Science & Technology Park https://www.hkstp.org/en/programmes/ideation	1, 2, 3, 4	35	-	Yes
3	Performances in class participation Students are expected to actively contribute to discussion in class.	1, 2, 3, 4	35	-	Yes

Continuous Assessment (%)

100

Assessment Rubrics (AR)**Assessment Task**

Individual Assignments

Criterion

To test students' knowledge about major concepts. To test students' skills to understand and use AI to perform different marketing tasks.

Excellent

High

Good

Significant

Fair

Moderate

Marginal

Basic

Failure

Not even reaching marginal levels

Assessment Task

Group Ideation Presentation

Criterion

In the group project, students are required to prepare an ideation plan which includes the product/service idea, target customers, problem to solve, AI technology involved, innovativeness, competitor analysis, sales and marketing

plan, business model, project schedule, team. The project consists of a PowerPoint report, an oral presentation and demonstration of a minimum viable product (MVP). The performance will be evaluated according to their capability to integrate concepts and strategies into real world situations. Peer evaluation will be conducted.

Excellent

High

Good

Significant

Fair

Moderate

Marginal

Basic

Failure

Not even reaching marginal levels

Assessment Task

Performances in class participation

Criterion

Students will be assessed based on their performance in class participation

Excellent

Proactively participate in class discussion by offering innovative ideas

Good

Participate in class discussion by offering innovative ideas

Fair

Occasionally participate in class discussion by offering acceptable ideas

Marginal

Reactively participate in class discussion by offering very limited ideas

Failure

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

This course provides students with an opportunity to learn AI knowledges for marketing applications: machine learning, deep learning, computer vision, natural language processing, generative AI, Retrieved Augmented Generation (RAG) and AI agent. Students can also refine the critical skills of effective oral and written presentation, decisiveness, and marketing expertise. The course focuses on learning-by-doing. Students will work together in group in preparing an ideation plan and a minimum viable product (MVP) for the idea. The project consists of a PowerPoint report and an oral presentation. In so doing, student can develop their abilities to present and defend their recommendations in an impactful and effective manner. There is a strong emphasis on collaborative learning through in-class case discussions and teamwork throughout the course.

Reading List

Compulsory Readings

Title	
1	Stuart Russell and Peter Norvig (2021). Artificial Intelligence, A Modern Approach, Fourth Edition, Pearson.
2	CS224N: Natural Language Processing with Deep Learning, Stanford / Winter 2025, https://web.stanford.edu/class/cs224n/

Additional Readings

Title	
1	CS221: Artificial Intelligence: Principles and Techniques, Stanford / Spring 2025 https://stanford-cs221.github.io/spring2025/
2	Andy Wu and Matt Higgins (2024), Computer Science for Strategists, Harvard Business School, 9-724-429, Rev: February 20, 2024.
3	Andy Wu, Goran Calic and Min Basadur (2022), 4 Types of Innovators Every Organization Needs, Harvard Business Review, Digital Article, 2022.
4	Andy Wu, Matt Higgins, Miaomiao Zhang and Hang Jiang (2024), AI Wars, Harvard Business School, 9-723-434, Rev: February 12, 2024
5	Christopher Stanton, Matt Higgins, Shira Aronson and Meg Shriber (2024), Generative AI and the Future of Work, Harvard Business School, 9-824-130, Rev: November 20, 2024.
6	Sebastian Raschka (2025), Build a Large Language Model (From Scratch), Manning.
7	Josyula, Prashanth and Singh, Karanbir (2025). Mastering Retrieval-Augmented Generation: Building next-gen GenAI apps with LangChain, LlamaIndex, and LLMs. www.bpbonline.com
8	Bahree, Amit (2024). Generative AI in Action. Manning.
9	Teoh, Teik Toe; Rong, Zheng (2022). Artificial Intelligence with Python (Machine Learning: Foundations, Methodologies, and Applications). Springer.