

COM5510: INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Introduction to Artificial Intelligence

Subject Code

COM - Media and Communication

Course Number

5510

Academic Unit

Media and Communication (COM)

College/School

College of Liberal Arts and Social Sciences (CH)

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

Part II Course Details

Abstract

This course is designed to equip students with fundamental concepts and practical skills in a technology-enabled manner. The course begins with a description of what the latest generation of artificial intelligence (AI) techniques are actually capable of. After introducing some basic concepts and techniques, this course illustrates the potential and current limitations of these techniques. Students can understand the strengths and weaknesses of human decision-making and learning, especially when combined with AI systems, as well as the ethical and policy implications of new AI capabilities.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Define AI-related concepts and identify problems where AI techniques are applicable	30	x	x	
2	Apply selected basic AI techniques and judge the applicability of more advanced techniques	20		x	x
3	Participate in the design of systems that act intelligently and learn from experience	10		x	x
4	Gain insight into the various subfields of AI	30	x		
5	Build a programming foundation for implementing AI algorithms	10			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	Lectures aim to provide an overview of various subfields of AI. Invitation of guest speakers or experts to share their insights and experiences in specific areas like machine learning, natural language processing, or computer vision. Assign readings or research assignments to deepen students' understanding of each subfield	1, 4	10 weeks

2	Tutorials	Critical discussions and activities to identify real-world problems and scenarios where AI techniques could be applied	1, 2, 3, 4, 5	1 week
3	Quiz	Assign readings or research assignments to deepen students' understanding of each subfield and assess their learning by regular quizzes	1, 2, 4	1 week
4	Final Project	Assign students individually or in groups to create projects that combine their understanding of AI techniques with programming skills. This could involve developing AI-powered applications, such as chatbots, recommendation systems, image recognition systems, or autonomous robots. Encourage them to document their project progress, challenges faced, and lessons learned.	2, 3, 4, 5	1 week

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Class participation	1, 2, 3, 4	10	Nil	Yes
2	Quiz	1, 2, 4, 5	40	Nil	No
3	Final project	3, 5	50	Nil	No

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)**Assessment Task**

1. Class participation

Criterion

Actively participate in in-class discussions and activities

Excellent

(A+, A, A-) Be able to ask critical questions and take a leading role in class discussions

Good

(B+, B, B-) Participate in discussions actively in class

Fair

(C+, C, C-) Seldom participate in discussions in class

Marginal

(D) Minimal participation; contributions lack relevance or depth

Failure

(F) Not participate in discussions in class

Assessment Task

2. Quiz

Criterion

Demonstrate an ability to analyze and apply the materials learned during the classes

Excellent

(A+, A, A-) Demonstrate a high level of understanding of course materials and ability to analyze and apply those materials

Good

(B+, B, B-) Demonstrate a moderate level of understanding of course materials and ability to analyze and apply those materials

Fair

(C+, C, C-) Demonstrate a low level of understanding of course materials

Marginal

(D) Barely meets minimum expectations; major gaps in comprehension

Failure

(F) Demonstrate little understanding of course materials

Assessment Task

3. Final project

Criterion

Demonstrate a deep understanding of the strengths and weaknesses of the implemented AI techniques

Excellent

(A+, A, A-) Demonstrate a high level of understanding of the strengths and weaknesses of the implemented AI techniques

Good

(B+, B, B-) Demonstrate a moderate level of understanding of the strengths and weaknesses of the implemented AI techniques

Fair

(C+, C, C-) Demonstrate a low level of understanding of the strengths and weaknesses of the implemented AI techniques

Marginal

(D) Minimal effort; superficial or incomplete analysis with significant flaws

Failure

(F) Demonstrate little understanding of the strengths and weaknesses of the implemented AI techniques

Additional Information for AR

Not applicable to students admitted before Semester A 2025/26

Part III Other Information**Keyword Syllabus**

Artificial Intelligence (AI), Machine Learning (ML), Data Analysis, Predictive Modeling, Data Mining
Big Data, Problem-Solving, Intelligent Systems, Data Preprocessing, Optimization Techniques

Reading List**Compulsory Readings**

Title	
1	Russell, S. J., & Norvig, P. (2010). Artificial intelligence: A modern approach (3rd ed.). Prentice Hall.

Additional Readings

Title	
1	Barry, P. (2016). Head first Python: A brain-friendly guide. O'Reilly Media, Inc.
2	Sutton, R. S., & Barto, A. G. (2018). Reinforcement learning: An introduction. MIT press.
3	Nilsson, N. J. (2009). The quest for artificial intelligence. Cambridge University Press.