TECNIA INSTITUTE OF ADVANCED STUDIES

Grade 'A' Institute

Department of Information, Communication & Technology

Master Of Computer Applications (MCA)

Scheme and Syllabus (w.e.f. Academic Session 2020-21 onwards)

Course Code: MCA-203 **L T C**
Course Name: Artificial Intelligence and Machine Learning **3 1 4**

LEARNING OBJECTIVES

In this course, the learners will be able to develop expertise related to the following:-

1. AI principles and approaches
2. Develop basic understanding of the building blocks of AI as presented in terms of intelligent agents: Search, Knowledge representation, inference, logic and learning.
3. Understanding nature of problems solved with ML.

PRE-REQUISITES

1. Basic knowledge of Mathematical Logic
2. Linear algebra

COURSE OUTCOMES (COs)

After completion of this course, the learners will be able to:

CO#	Detailed Statement of the CO	BT Level	Mapping to PO #
CO1	Define the meaning of Intelligence and recall various models for knowledge representation and reasoning within an AI problem domain	BTL1	PO1, PO2
CO2	Summarize varied learning algorithms and model selection	BTL2	PO1, PO2, PO3
CO3	Apply the concept of learning trends and patterns from data to build an appreciation for what is involved in learning from data.	BTL3	PO1, PO2, PO3, PO4, PO5
CO4	Analyze and apply a variety of learning algorithms to data	BTL4	PO1, PO2, PO3, PO4, PO5, PO6, PO10
CO5	Appraise AI algorithms and assess their performance. Follow standards and ethical practices	BTL4	PO1, PO2, PO3, PO4, PO5, PO6, PO10,
CO6	Develop a strong foundation for a wide variety of state-of-the-art Machine Learning algorithms.	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO10, PO11, PO12