Course Name	ARTIFICIAL INTELLIGENCE	Course Code	COMP 241		
Credit Hours	3	Contact Hours	Lec	Lab	Total
			2	2	4
Offered as	☐ University Requirement ☐ College Requirement ☒ Program Requirement ☒ Core ☐ Elective ☒ ITEC ☒ COMP ☐ CNET				
Level	6	Prerequisite	NIL		

Course Description:

This course offers basic concepts of the intelligence, innovations, achievements and advanced development in the areas of AI. It covers modern techniques for computers to represent task-relevant information and intelligent decisions system, solving problems by searching towards the achievement of goals. It covers some advanced topics namely Planning, Learning, Robotics and Multi-Agent Systems basics.

Upon completion, the student will be able to:

- Understand the basic concepts of the Intelligence, Artificial Intelligence and innovative achievements in the development of AI.
- Identify and choose appropriate PEAS description, characteristics of environment and the agent architecture, for a given problem to be solved by an Intelligent agent.
- Apply uninformed/ informed search strategies to solve a given search / optimization problem.
- Design and implement the concepts of problem solving and algorithms.
- Identify the techniques in Planning, Learning, Robotics and Multi Agent systems basics.
- Know and integrate various artificial intelligence techniques in intelligent system development and maintaining intelligent systems.

Assessment Methods							
	Exam-1 ☒	10%	Exam-2 ☒	10%	Assignments ☒	10%
	Mini Project ☒	10%	Lab Exam ☒	20%	Final Exam ☒	40%

Text Book:

- Stuart Russell and Peter Norvig, Artificial Intelligence: A Modern Approach, Prentice Hall, 3rd Edition, 2010. ISBN-13: 978-0-13-604259-4.

Reference Book:

- Tim Jones, "Artificial Intelligence a Systems Approach", 1st Edition, Infinity Science Press LLC, ISBN: 978-0763773373, 2008.
- Nils J Nilsson, The Quest for Artificial Intelligence, Cambridge University Press, 2009.
- William F Clocksin and Christopher S Mellish, Programming in Prolog: Using the ISO Standard, Fifth Edition, Springer, 2003.
- Gerhard Weiss, Multi Agent Systems, Second Edition, MIT Press, 2013.