Course Name	COMPUTATIONAL INTELLIGENCE	Course Code	COMP – 544		
Credit Hours	2	Contact Hours	Theory	Lab	Total
			2	-	2
Offered as	☐ University Requirement ☐ College Requirement ☒ Program Requirement ☒ Core ☐ Elective ☐ ITEC ☒ COMP ☐ CNET				
Level	10	Prerequisite	NIL		

Course Description:

This course provides a strong foundation on fundamental concepts in Computational Intelligence. This course covers Problem-solving through various searching techniques. It covers the techniques in applications which involve perception, reasoning and learning, information retrieval and machine learning.

Course objectives:

- Understand the basic exposition to the goals and methods of Computational Intelligence.
- Design and implement the intelligent computational techniques.
- Apply the Intelligent techniques for problem solving.
- Identify problem solving skills using the acquired knowledge in the areas of reasoning, natural language understanding, computer vision, automatic programming and machine learning.

Grading	☒ Exam 1	10%	☒ Exam 2	10%	☒ Assignment 1	10%
	☒ Assignment 2	10%	☒ Oral Presentation	20%	☒ Final	40%

Text Book:

- Stuart Russell, Peter Norvig, ―Artificial Intelligence: A Modern Approach, Third Edition, Pearson Education / Prentice Hall of India, 2010.
- Elaine Rich and Kevin Knight, ―Artificial Intelligence, Third Edition, Tata McGraw-Hill, 2010.

References:

- Patrick H. Winston. "Artificial Intelligence", Third edition, Pearson Edition, 2006.
- Dan W. Patterson, ―Introduction to Artificial Intelligence and Expert Systems‖, PHI, 2006.
- Nils J. Nilsson, ―Artificial Intelligence: A new Synthesis, Harcourt Asia Pvt. Ltd., 2000.