1.	Title of the course	Artificial Intelligence
2.	Course number	CS539L
3.	Structure of credits (L-T-P-C)	3-0-0-3
4.	New course/modification to	Modified with CS514L/ARTIFICIAL INTELLIGENCE
5.	To be offered by	Computer Science and Engineering
6.	Prerequisite	CoT
7.	**Course Objective(s):** To impart theoretical understanding of the artificial intelligence formalism and problem formulation; To explain the state of the art practical artificial intelligence systems.	
8.	**Course Content:** Concepts in artificial intelligence (AI) including: state space representation and search, knowledge representation and reasoning; Different types of state space search algorithms including deterministic search, heuristic driven search and randomized algorithms; Concepts in formal logic and unification algorithms and working principles of Prolog; Planning and constraint satisfaction algorithms and working principles of PDDL; Game playing mechanisms including alpha beta pruning and heuristic driven; Practical large scale systems including resource descriptor framework (RDF); Applications of AI.	
9.	**Textbook(s):** 1. Deepak K, A First Course in Artificial Intelligence, McGrawHill, 1st Edition (2015). 2. Ivan B, PROLOG: Programming for Artificial Intelligence, Pearson, 3rd Edition (2017).	
10.	**Reference(s):** 1. Stuart J R, Artificial Intelligence: A Modern Approach, Pearson, 3rd Edition (2015). 2. Irving M C, Symbolic Logic, Pearson, 5th Edition (2005).	