

Bhoj Reddy Engineering College for Women: Hyderabad

Department of Information Technology

Lesson plan of faculty member for the academic year 2020–21

Class: III B Tech

Branch-Section: IT-A

Semester: I

Subject: Artificial Intelligence

Lectures per week: 3

S.NO	Topics to be covered	Date (s)
UNIT- I: Introduction		
1	AI Introduction	1 September 2020
2	AI applications and Problems	5 September 2020
3	Agents and Environments,	7 September 2020
4	Structure of Agents	8 September 2020
5	Problem Solving Agents	12 September 2020
6	Basic Search Strategies: Problem Spaces,	14 September 2020
7	Uninformed Search -Breadth-First	15 September 2020
8	Depth-First Search	19 September 2020
9	Depth-first with Iterative Deepening	21 September 2020
10	Heuristic Search -Hill Climbing	22 September 2020
11	Generic Best-First	26 September 2020
12	A* algorithm	28 September 2020
13	Constraint Satisfaction- Backtracking	29 September 2020
14	Local Search	3 October 2020
UNIT- II: Searching and Basic Knowledge Representation		
15	Advanced Search: Constructing Search Trees	5 October 2020
16	Stochastic Search	6 October 2020
17	A* Search Implementation	10 October 2020
18	Minimax Search	12 October 2020
19	Alpha-Beta Pruning	13 October 2020
20	Basic Knowledge Representation and Reasoning	26 October 2020
21	Propositional Logic	27 October 2020
22	First-Order Logic	31 October 2020
23	Forward Chaining and Backward Chaining	9 November 2020
24	Introduction to Probabilistic Reasoning	10 November 2020
25	Bayes Theorem	16 November 2020
UNIT- III: Advanced Knowledge Representation		
26	Advanced Knowledge Representation and Reasoning	17 November 2020
27	Knowledge Representation Issues	21 November 2020
28	Nonmonotonic Reasoning	
29	Other Knowledge Representation Schemes	23 November 2020
30	Reasoning Under Uncertainty	24 November 2020
31	Basic probability	28 November 2020
32	Acting Under Uncertainty	1 December 2020
33	Bayes' Rule	5 December 2020
34	Representing Knowledge in an Uncertain Domain	7 December 2020
35	Bayesian Networks	8 December 2020
UNIT- IV: Learning		
36	What Is Learning	12 December 2020
37	Rote Learning	14 December 2020
38	Learning by Taking Advice	15 December 2020
39	Learning in Problem Solving	19 December 2020
	Learning from Examples	21 December 2020

40	Winston's Learning Program, Decision Trees	22 December 2020
	UNIT- V: Expert Systems	
41	Representing and Using Domain Knowledge	28 December 2020
42	Shell, Explanation	29 December 2020
43	Knowledge Acquisition	2 January 2021

Text books:

1. Russell, S. and Norvig, P, Artificial Intelligence: A Modern Approach, Third Edition, Prentice-Hall, 2010.

Reference Books:

1. Artificial Intelligence, Elaine Rich, Kevin Knight, Shivasankar B. Nair, The McGraw Hill publications, Third Edition, 2009.
2. George F. Luger, Artificial Intelligence: Structures and Strategies for Complex Problem Solving, Pearson Education, 6th ed., 2009.

Name and signature of the faculty: Ms. Maya B Dhone ----

Name and signature of Head of the Department: Dr. C Murugamani ----