



GANPATI INSTITUTE OF ENGINEERING AND TECHNOLOGY(POLYTECHNIC)
Mathasahi , Jagatpur , Cuttack - 754200

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
LESSON PLAN**

Session (2025-2026)(S)

Discipline: Computer Science & Engineering	Semester: 6th, Summer/2025	Name of the Teaching Faculty: Miss. Smaranika Moharana
Subject: ARTIFICIAL INTELLIGENCE & MACHINE LEARNING Theory-04A	No. Of Days/Week: 04	Start Date: 22.12.2025 End Date: 18.04.2026

Week	Class Day	Theory Topics
1st	1st	Unit-1: Introduction to AI Definition of AI, History of AI
	2nd	Goals of AI, Applications of AI
	3rd	Intelligent AI, Computer Vision
	4th	Natural Language Processing
2nd	1st	Turning test, Problem solving in Games
	2nd	Unit-2: Introduction to Search Algorithm Introduction, Search, search space, search tree
	3rd	Catagories and type of search
	4th	Heuristic Algorithm vrs Solution Guaranteed Algorithm
3rd	1st	Heuristic Algorithm vrs Solution Guaranteed Algorithm
	2nd	Local and Optimal Problem ,Hill climbing
	3rd	BSF Algorithm
	4th	A* Algorithm
4th	1st	AO* Algorithm
	2nd	Adversarial Search
	3rd	AI & Game Playing
	4th	Unit-3: Knowledge Representation And Reasoning What to represent and knowledge

	2nd	Kknowledge Representation
	3rd	Reasoning and Types of Reasoning
	4th	Unit-4: Machine Learning Introduction to Machine Learning with Explanation with Examples
6th	1st	Statistical or Unsupervised Learning
	2nd	Statistical or Unsupervised Learning
	3rd	ML Properties
	4th	Reinforcement Learning
7th	1st	Reinforcement Learning
	2nd	Decision Tree
	3rd	Decision Tree
	4th	Unit-5: Pattern Recognition Introduction to Pattern Recognition
8th	1st	DesignPrinciples
	2nd	Design Principle of Pattern Recognition System
	3rd	Design Principle of Pattern Recognition System
	4th	Statistical Pattern Recognition System
9th	1st	Statistical Pattern Recognition System
	2nd	Machine Perception
	3rd	Machine Perception
	4th	Machine Perception
10th	1st	Line finding and Interception
	2nd	Line finding and Interception
	3rd	Line finding and Interception
	4th	Object Identification
11th	1st	Object Identification
	2nd	Unit-6: Expert System Introduction to Expert System
	3rd	Basic Architecture
	4th	Types of Problem Solve by Expert System
12th	1st	Types of Problem Solve by Expert System
	2nd	Features of Types of an Expert System
	3rd	Expert System Architecture

13th	4th	Expert System Architecture
	1st	Expert System Tool
	2nd	Existing Expert System
	3rd	Application of Expert System Technology
14th	4th	Assignment Check
	1st	Assignment Check
	2nd	Assignment Check
	3rd	Revision
15th	4th	Revision
	1st	Discussion of Question Answer
	2nd	Discussion of Question Answer
	3rd	Discussion of Previous Question Answer
	4th	Discussion of Previous Question Answer

Sign of faculty
 Jayaramika
 19.12.2025

S.P. Pathak
 19.12.25
 Sign of Sr. Lecturer
 Dept. of Computer Science & Engg.

19.12.25
 Sign of Principal
 GIET (Polytechnic)
 Jagatpur, Cuttack