LESSON PLAN

SUB: CIM

BRANCH:- MECHANICAL ENGG.

SEMESTER: 4TH
NAME OF FACULTY: KEDAR PRUSTY

GOVERNMENT POLYTECHNIC, BHADRAK

SESSION:2025-26

Hod ,Mechanical 20/12/25

Academic Co-ordinator 20/12/25

Principal
Govt. Polytechnic, Bhadrak
20.12.25

ACADEMIC LESSON PLAN FOR COMPUTER INTEGRATED MANUFACTURING(TH-3)

Discipline: **MECHANICAL E NGG.**	Semester: **4th**	NameoftheTeaching Faculty: **KEDAR PRUSTY Lecturer(GF) Mechanical Engg.**
Subject: **COMPUTER INTEGRATED MANUFACTURING**	No. of days/per week class allotted: **03**	Semester From date:**22/12/2025**To Date: **18/04/2026** No. of Weeks: **15**
Week	Class Day	**Theory Topics**
1ST	1ST	Concept of Computer Integrated Manufacturing (CIM);
	2ND	Basic components of CIM;
	3RD	Distributed database system;
2ND	1ST	Distributed communication system
	2ND	Distributed communication system
	3RD	Computer networks for manufacturing
3RD	1ST	Computer networks for manufacturing
	2ND	Future automated factory;
	3RD	Social and economic factors
4TH	1ST	Revision & question discussion.
	2ND	Computer Aided Design (CAD):
	3RD	CAD hardware and software;
5TH	1ST	Product modelling,
	2ND	Automatic drafting;
	3RD	Automatic drafting;
6TH	1ST	Engineering analysis;
	2ND	FEM design review and evaluation;
	3RD	FEM design review and evaluation;
7TH	1ST	Group technology centre.
	2ND	Revision & question discussion.
	3RD	Computer Aided Manufacturing (CAM),
8TH	1ST	Computer assisted NC part programming for plain turning and step turning;
	2ND	Computer assisted NC part programming for plain turning and step turning;
	3RD	Computer assisted robot programming;
9TH	1ST	Computer assisted robot programming;
	2ND	computer aided process planning (CAPP)

	3RD	computer aided material requirements planning (MRP)
10TH	1ST	Revision & question discussion.
	2ND	Computer aided production scheduling;
	3RD	Computer aided production scheduling;
11TH	1ST	computer aided inspection planning;
	2ND	computer aided inspection planning;
	3RD	computer aided inventory planning,
12TH	1ST	computer aided inventory planning,
	2ND	Flexible manufacturing system (FMS); concept of flexible manufacturing.
	3RD	Flexible manufacturing system (FMS); concept of flexible manufacturing.
13TH	1ST	Flexible manufacturing system (FMS); concept of flexible manufacturing.
	2ND	Revision & question discussion.
	3RD	Integrating NC machines, robots, agvs, and other NC equipment;
14TH	1ST	Integrating NC machines, robots, agvs, and other NC equipment;
	2ND	Computer aided quality control;
	3RD	Computer aided quality control;
15TH	1ST	Business functions, computer aided forecasting;
	2ND	Office automation
	3RD	Revision & question discussion.

REFERENCES: 1. CAD, CAM, CIM byP. Radhakrishnan and S. Subramanyan, New Age International Publishers.

2. Computer Integrated Manufacturing by Paul G. Rankey, Prentice Hall.

3. Robotics Technology and Flexible Automation – S.R. Deb, TMH

Kedar prusty

KEDAR PRUSTY
LECT. (GF) (MECHANICAL ENGG.)
GOVT. POLYTECHNIC, BHADRAK