

# LESSON PLAN

**SUB: CIM**

**BRANCH:- MECHANICAL ENGG.**

**SEMESTER: 4TH**

**NAME OF FACULTY: KEDAR PRUSTY**

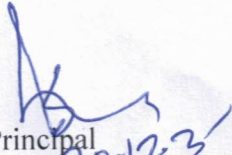


**GOVERNMENT POLYTECHNIC,  
BHADRAK**

**SESSION:2025-26**

  
Hod ,Mechanical

  
Academic Co-ordinator

  
Principal  
Govt. Polytechnic, Bhadrak



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

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



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

- REFERENCES: 1. CAD, CAM, CIM by P. 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

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