

GOVT. POLYTECHNIC KANDHAMAL, PHULBANI  
At- Salunki, PO- Phulbani, Pin- 762001, website- gpkandhmal.org  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**LESSON PLAN**

Discipline: Mechanical	Semester: 4th	Name of the Teaching faculty: Manas Kumar Mishra
Subject: Computer Integrated Manufacturing (TH3)	No of Days/Week class allotted: 3	Semester from Date: 22/12/25 To Date: 18/04/26 No of weeks: 15
Week	Class Day	Topics
1st	1st	Syllabus, Cos, Lesson plan, Internals, Exams
		Concept of Computer Integrated Manufacturing (CIM)
	2nd	Basic components of CIM
	3rd	Distributed database system; distributed communication system
2nd	1st	Distributed database system; distributed communication system
	2nd	Computer networks for manufacturing
	3rd	Computer networks for manufacturing
3rd	1st	Future automated factory
	2nd	Future automated factory
	3rd	Social and economic factors.
4th	1st	Social and economic factors.
	2nd	Computer Aided Design (CAD): CAD hardware and software
	3rd	Computer Aided Design (CAD): CAD hardware and software
5th	1st	Product modelling
	2nd	Automatic drafting
	3rd	Engineering analysis
6th	1st	Engineering analysis
	2nd	FEM design review and evaluation
	3rd	FEM design review and evaluation
7th	1st	Group Technology Centre.
	2nd	Group Technology Centre.
	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 NC part programming for plain turning and step turning
9th	1st	Computer assisted robot programming;
	2nd	Computer assisted robot programming;
	3rd	Computer aided process planning (CAPP)

10th	1st	Computer aided material requirements planning (MRP)
	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)
	3rd	Flexible manufacturing system (FMS)
13th	1st	Concept of flexible manufacturing
	2nd	Concept of flexible manufacturing
	3rd	Integrating NC machines, robots
14th	1st	AGVs, and other NC equipment
	2nd	Computer aided quality control
	3rd	Computer aided quality control
15th	1st	Business functions
	2nd	Computer aided forecasting
	3rd	Office automation

*M. S. D.*  
22.12.25

signature of faculty