

PNS SCHOOL OF ENGINEERING & TECHNOLOGY,

MARSHAGHAI, KENDRAPARA

LESSON PLAN

Discipline: MECHANICAL	Group	SEMESTER: 5TH	Name of the Teaching Faculty: Sanyasi Swain/ Prafulla kumar Nayak
Subject: CAD/CAM Lab (PR-3)		No. of Days/per week class allotted: 4	Semester From date: 14.07.2025 to Date : 15.11.2025 , No. of weeks: 12
week		Class Day	Topics
1st	A & B	1st	INTRODUCTION: Part modelling, Datum plane,
		2nd	Datum plane; constraint;
	A & B	1st	dimensioning; extrude; revolve; sweep;
		2nd	protrusion; extrusion; rib; shell; hole;
2nd	A & B	1st	round; chamfer; copy; mirror; assembly; align; orient.
		2nd	EXERCISES: 2D Drawings of Rectangle, circle, polygon
	A & B	1st	and its dimensioning
		2nd	Command practice
3rd	A & B	1st	3D Drawings
		2nd	Record Verification
	A & B	1st	1. Gib and cutter joint
		2nd	2. Screw Jack;
4th	A & B	1st	3. Connecting Rod;
		2nd	4. Bearing Block.
	A & B	1st	Print the orthographic view from the above assembled 3D drawing
		2nd	Command practice
5th	A & B	1st	Record Verification
		2nd	CNC Programming and Machining INTRODUCTION; 1. Study of CNC lathe, milling;
	A & B	1st	2. Study of international codes; G-Codes and M – Co
		2nd	3. Format – Dimensioning methods;
6th	A & B	1st	4. Programme writing – Turning Simulator-Milling simulator
		2nd	practice-commands menus
	A & B	1st	5. Editing the programme in the CNC MACHINES;
		2nd	6. Execute the programme in the CNC machines;
7th	A & B	1st	Record Verification
		2nd	Command practice
	A & B	1st	Exercise; 1. Print the programme and make the component in the CNC machine;
		2nd	Record Verification
8th	A & B	1st	2. Using canned cycle-create a part programme for thread cutting, grooving and produce component in the CNC Turning Machine
		2nd	Command practice
	A & B	1st	Command practice
		2nd	Record Verification
	A & B	1st	Command practice

9th	A & B	2nd	Command practice
	A & B	1st	Record Verification
		2nd	3.Using Linear interpolation and Circular
10th	A & B	1st	Interpolation-Create a part programme for grooving and produce component in the CNC Milling Machine
		2nd	Command practice
	A & B	1st	Command practice
		2nd	Record Verification
11th	A & B	1st	Command practice
		2nd	Command practice
	A & B	1st	Record Verification
		2nd	Command practice

signature of Lecturer / demonstrator

signature of HOD

signature of Principal