

# LESSON PLAN

GOVT. POLYTECHNIC, NAYAGARH

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT: CAD & CAM LAB

Periods:4P/WEEK

SEMESTER:5th

NAME OF FACULTY: Mrs. Monalisa Sahoo, W/S Suptd. & HOD

ACADEMIC YEAR.2024-25

Mr. Ramya Rashmi Rout, Lect. (GF)

From date: 01/07/2024

To Date: 08/11/2024

No. of weeks: 15

Week	Class Day(3hrs./day)	Theory / Practical Topics
1st	1st	INTRODUCTION
	2nd	Part Modelling, Datum Plane, Datum Plane, Constraint, Dimensioning
2nd	1st	Extrude, Revolve, Sweep
	2nd	Protrusion, Extrusion, Rib
3rd	1st	Shell, Hole, Round, Chamfer
	2nd	Copy, mirror
4th	1st	Assembly, Align, Orient.
	2nd	2D Drawings of Rectangle, circle
5th	1st	Polygon and its dimensioning
	2nd	Polygon and its dimensioning
6th	1st	3D Drawings of 1.Gib and cutter joint
	2nd	3D Drawings of 1.Gib and cutter joint
7th	1st	2.Screw Jack
	2nd	2.Screw Jack
8th	1st	3.Connecting Rod
	2nd	3.Connecting Rod
9th	1st	4.Bearing Block
	2nd	4.Bearing Block
10th	1st	Print the orthographic view from the above assembled 3Ddrawing
	2nd	CNC Programming and Machining Introduction
11th	1st	1.Study of CNC lathe, milling
	2nd	2.Study of international codes; G-Codes and M –Codes Machine
12th	1st	3.Format –Dimensioning methods
	2nd	4.Programme writing –Turning Simulator-Milling simulator IS practice-commands menus
13th	1st	5.Editing the programme in the CNC MACHINES

	2 <sup>nd</sup>	6. Execute the programme in the CNC machines
14 <sup>th</sup>	1 <sup>st</sup>	Exercise; 1. Print the programme and make the component in the CNC machine
	2 <sup>nd</sup>	2. Using canned cycle-create a part programme for thread cutting, grooving and produce component in the CNC Turning Machine
15 <sup>th</sup>	1 <sup>st</sup>	3. Using Linear interpolation and Circular Interpolation-Create a part programme for grooving and produce component in the CNC Milling
	2 <sup>nd</sup>	CNC Programming and Machining introduction

MSJ  
29/07/24

Ramya Leshmi Rout  
Cet. (G.F)