

# LESSON PLAN

GOVT. POLYTECHNIC, NAYAGARH

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT: CAD /CAM LAB

Periods:4P/WEEK

SEMESTER:5<sup>th</sup>

ACADEMIC YEAR.2025-26

NAME OF FACULTY: Mrs. Monalisa Sahoo, Sr.Lect. & HOD

From date: 14/07/2025

To Date: 15/11/2025

No. of weeks: 15

Week	Class Day(3hrs./day)	Theory / Practical Topics
1 <sup>st</sup>	1 <sup>st</sup>	INTRODUCTION
	2 <sup>nd</sup>	Part Modelling, Datum Plane, Datum Plane, Constraint, Dimensioning
2 <sup>nd</sup>	1 <sup>st</sup>	Extrude, Revolve, Sweep
	2 <sup>nd</sup>	Protrusion, Extrusion, Rib
3 <sup>rd</sup>	1 <sup>st</sup>	Shell, Hole, Round, Chamfer
	2 <sup>nd</sup>	Copy, mirror
4 <sup>th</sup>	1 <sup>st</sup>	Assembly, Align, Orient.
	2 <sup>nd</sup>	2D Drawings of Rectangle, circle
5 <sup>th</sup>	1 <sup>st</sup>	Polygon and its dimensioning
	2 <sup>nd</sup>	Polygon and its dimensioning
6 <sup>th</sup>	1 <sup>st</sup>	3D Drawings of 1.Gib and cutter joint
	2 <sup>nd</sup>	3D Drawings of 1.Gib and cutter joint
7 <sup>th</sup>	1 <sup>st</sup>	2.Screw Jack
	2 <sup>nd</sup>	2.Screw Jack
8 <sup>th</sup>	1 <sup>st</sup>	3.Connecting Rod
	2 <sup>nd</sup>	3.Connecting Rod
9 <sup>th</sup>	1 <sup>st</sup>	4.Bearing Block
	2 <sup>nd</sup>	4.Bearing Block
10 <sup>th</sup>	1 <sup>st</sup>	Print the orthographic view from the above assembled

		3Ddrawing
	2 <sup>nd</sup>	CNC Programming and Machining Introduction
11 <sup>th</sup>	1 <sup>st</sup>	1.Study of CNC lathe, milling
	2 <sup>nd</sup>	2.Study of international codes; G-Codes and M -Codes Machine
12 <sup>th</sup>	1 <sup>st</sup>	3.Format -Dimensioning methods
	2 <sup>nd</sup>	4.Programme writing -Turning Simulator-Milling simulator IS practice-commands menus
13 <sup>th</sup>	1 <sup>st</sup>	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

*Resh*  
 11/07/25  
 Sr. Lect Mech.