Lesson Plan on

(PR-3) CAD/CAM LAB (5th sem)

Prepared by

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	GOVERNMENT POLYTECHNIC, PURI **DEPARTMENT OF MECHANICAL ENGINEERING**	
Discipline: MECHANICAL ENGG	Semester: **5TH**	Name of the Teaching Faculty: **MR MILAN NARENDRA, PTGF IN MECH.ENGG.**
Subject: CAD/CAM LAB	No. of days/per week class allotted:**04**	Semester From date: **01.10.2021** To Date:**08.01.2022** No.of Weeks:**15**
PRE-REQUISITE	Basic knowledge of engineering and machine drawing.	
COURSE OUTCOMES	**CO1:**Understand the fundamentals and use of CAD. **CO2:**Conceptualize drafting and modelling in CAD. **CO3:**Interpret the various features in the menu of solid modelling package. **CO4:**Synthesize various parts or components in an assembly. **CO5:** Prepare CNC programmes for various jobs.	

Week	Class Day	Theory/Practical Topics	DELIVERY METHOD
1ST	1ST	INTRODUCTION	Software
	2ND	Part modelling	Software
	3RD	Datum plane	Software
	4TH	Constraint	Software
2ND	1ST	Dimensioning	Software
	2ND	Extrude	Software
	3RD	Revolve	Software
	4TH	Sweep	Software
3RD	1ST	Protrusion	Software
	2ND	Extrusion	Software
	3RD	Rib	Software
	4TH	Shell	Software
4TH	1ST	Hole	Software
	2ND	Round	Software
	3RD	Chamfer	Software
	4TH	Copy	Software
5TH	1ST	Mirror	Software
	2ND	Assembly	Software
	3RD	Assembly	Software
	4TH	Assembly	Software
6TH	1ST	Assembly	Software
	2ND	Align	Software
	3RD	Align	Software
	4TH	Orient	Software
7TH	1ST	Orient	Software
	2ND	2D Drawings of Rectangle, circle, polygon and its dimensioning	Software
	3RD	2D Drawings of Rectangle, circle, polygon and its dimensioning	Software
	4TH	3D Drawings of Gib and cutter joint	Software
8TH	1ST	Gib and cutter joint	Software

	2ND	Screw Jack	Software
	3RD	Screw Jack	Software
	4TH	Bearing Block	Software
9TH	1ST	Bearing Block	Software
	2ND	Application areas for CAD/CAM	Software
	3RD	CNC Programming and Machining	PPT
	4TH	CNC Programming and Machining	PPT
10TH	1ST	Study of CNC lathe, milling	Whiteboard
	2ND	Study of CNC lathe, milling	Whiteboard
	3RD	Study of CNC lathe, milling	Whiteboard
	4TH	Study of international codes; G-Codes and M –Codes	Whiteboard
11TH	1ST	Study of international codes; G-Codes and M –Codes	Whiteboard
	2ND	Study of international codes; G-Codes and M –Codes	Whiteboard
	3RD	Format –Dimensioning methods	Whiteboard
	4TH	Format –Dimensioning methods	Whiteboard
12TH	1ST	Program writing –Turning Simulator-Milling simulator IS practice-commands menus	Whiteboard
	2ND	Program writing –Turning Simulator-Milling simulator IS practice-commands menus	Whiteboard
	3RD	Editing the program in the CNC MACHINES	Whiteboard
	4TH	Editing the program in the CNC MACHINES	Whiteboard
13TH	1ST	Execute the program in the CNC machines	Whiteboard
	2ND	Execute the program in the CNC machines	Whiteboard
	3RD	Execute the program in the CNC machines	Whiteboard
	4TH	**QUIZ&ASSIGNMENT-V**	Google Docs
14TH	1ST	REVISION	
	2ND	REVISION	
	3RD	REVISION	
	4TH	REVISION	
15TH	1ST	REVISION	
	2ND	REVISION	
	3RD	REVISION	
	4TH	REVISION	

LEARNINGRESOUCES:

01. CAD/CAM by R. Radhakrishna, S. Subramanian, New Age International Pvt Ltd.
02. CAD/CAM by Mikell Grover.

WEBSITERESOUCES:

01. https://www.youtube.com/watch?v=EgKc9L7cbKc&list=PLSGws_74K0187XbrrYx46emEz2fmgo8F8
02. https://www.youtube.com/watch?v=49RET0N-ITY&list=PLFW6lRTa1g808_CfYhZKdv2eXplAQiAwS

Nilan Nanendra 08/10/21
Sign. of Facultyconcerned

Principal
G.P.Puri

08/10/2021
Sign.of HODi/c