



Techno India NJR Institute of Technology

Academic Administration of Techno NJR Institute

Syllabus Deployment

Name of Faculty	: Ms. NISHA PATEL	Subject Code: 3ME4-21
Subject	: Machine Drawing Practice	
Department	: Mechanical Engineering	Sem: III
Total No. of Lectures Planned: 20		

COURSE OUTCOMES:

At the end of this course students will be able to:

- CO1: Learn the basic concepts and to draw the views of section of solids, orthographic projections and threaded fasteners.
- CO2: Create assembly and get the detailed drawing of machine components.
- CO3: Represent tolerances and the levels of surface finish of machine elements.
- CO5: Develop the ability to apply Limits, Fits, and Dimensional Tolerances, as well as Geometric Tolerances to components and assemblies on Engineering Drawings.
- CO6: Develop an ability to create 2D drawings from 3D models.

S No.	Unit	Topic
1	1	ASSEMBLY DRAWING: Assembly drawing with sectioning and Bill of materials.
2	1	Bill of materials of Lathe tail stock
3	1	Bill of materials of shaper tool head
4	1	Bill of materials of swivel machine vice
5	1	Drawing sheet
6	1	Drawing sheet
7	2	DETAILED PART DRAWINGS FROM ASSEMBLY DRAWING
8	2	Indicating fits, tolerances

9	2	Surface finish symbols by referring BIS codes
10	2	Check-valve, Junction Valve
11	2	Drawing sheet
12	2	Drawing sheet
13	3	COMPUTER AIDED DRAFTING: Introduction to different features of the CAD Software (AutoCAD/ProE/ Creo/Solidworks)
14	3	One drawing problem related to a. 2-D Drafting.
15	3	b. 3-D Modeling.
16	3	c. 3-D Advanced Modeling.
17	3	d. Assembly modeling.
18	3	e. Feature Modification and Manipulation
19	3	f. Detailing.
20	3	g. Surface Modeling

TEXT/REFERENCE BOOKS

1. N.D. BHATT AND V.M. PANCHAL, ENGINEERING GRAPHICS, CHAROTAR PUBLISHERS 2013
2. E. FINKELSTEIN, "AUTOCAD 2007 BIBLE", WILEY PUBLISHING INC., 2007