राष्ट्रीय प्रौद्योगिकी संस्थान, मिजोरम
NATIONAL INSTITUTE OF TECHNOLOGY, MIZORAM
(An Institute of National Importance under Ministry of HRD, Govt. of India)
CHALTLANG, AIZAWL, MIZORAM – 796012

Phone/Fax: 0389-2341699 / 0389-2341236 / 0389-2341774 Email: nit_mizoram@nitmz.ac.in

DEPARTMENT OF MECHANICAL ENGINEERING

2nd Semester:

SL.No	Course code	Course Title	L-T-P	Credits
1.	MEL1203	Engineering Drawing	4-0-0	8
2.	MEP1204	Mechanical Workshop	0-0-2	4
		Total		**12**

Course code	Course Title	Semester	L-T-P	Credits
MEL1203	Engineering Drawing	2nd	4-0-0	8

Introduction: Importance of Engineering Drawing**,** General instruction, Lines, Lettering, Dimensioning and freehand sketch.

Geometrical construction and Scale: Bisecting a line, arc and angle, Dividing straight line in to equal number of parts, Tangents to lines and arcs, Construction of pentagon, hexagon and octagon, Inscribing circles inside regular polygons, Plane and Diagonal.

Conic Sections: Type of conic surface, Method of construction of ellipse, Method of construction of parabola, Method of construction of hyperbola.

Projection of point and straight line: Point Projection, Line parallel to both the reference planes, Line perpendicular to one reference plane and parallel to the other, Line inclined to one reference plane and parallel to the other, Line inclined to both the reference planes, True length and inclination, Traces of lines.

Projection of plane: Plane perpendicular to both the reference planes, Plane perpendicular to one reference plane and parallel to the other. Plane inclined to one reference plane and perpendicular to the other, Plane inclined to both the reference plane.

Projection of solids: Axis of solid parallel to both the reference planes, Axis of solid perpendicular to one reference plane and parallel to the other, Axis of solid inclined to both the reference planes.

Sections of solids: Sectional view, section plane perpendicular to the HP & VP and other various positions, True shape of sections.

Development of surface: The principle of development of surfaces, Methods for drawing the development of surfaces.

Orthographic projection: Orthographic projection of different types of simple objects, Sectional view of different types of simple objects.

Isometric projection: Principle of isometric projection, Isometric scale, Produce for drawing isometric projection, Isometric projection and isometric view.

Books:-

SL.No	Name of the book	Author	Publication
1	Engineering Drawing	N.D. Bhatt et.al.	Charotor Publishing House.
2	Engineering Drawing	B. Agrawal et.al.	Tata Mc Graw Hill.
3	Engineering Drawing	Dhananjay A. Jolie	Tata Mc Graw Hill.