## **ENGINEERING DRAWING AND GRAPHICS (ME-111)**

Pre-requisite: None Credit Hours: 02 Contact Hours: 32

# RECOMMENDED BOOK(S)

Engineering Drawing by N. D. Bhatt.

Practical Geometry & Engineering Graphics by Abbot.

### **REFERENCE BOOK(S)**

Technical Graphics Communication by BertolineWiebe, Miller.Mohler, Irwin McGraw-Hill.

### **COURSE OBJECTIVES**

To inculcate in students the ability to comprehend the science of Engineering Drawing so that they are able to convey their creative ideas effectively. To provide the link from conventional 2D drawings.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	<b>Define</b> the fundamentals of engineering drawing and graphics.	C1	01
2	<b>Describe</b> the concepts of projection of points, lines, planes and solids.	C2	01
3	<b>Explain</b> orthographic projections, isometric views, and sectional views of different mechanical parts, and development of surfaces.	C2	01

#### **COURSE CONTENTS**

Introduction / Role of graphics in engineering

**Projections Theory** 

Orthographic Projections

Orthographic Reading

Dimensioning

**Projection of Points** 

**Projection of Lines** 

**Projection of Planes** 

**Projection of Solids** 

Section Views

Dimensioning and tolerance Threaded Fasteners (Threads) Threaded Fasteners (Nut, Bolts and Washers) Working drawings Isometric Projections Development of surfaces