

## **ME-111 Engineering Drawing**

Drawing instruments and sheets; Importance of conventions and standards in engineering drawing

Geometrical construction of plane figures, conic sections, cycloidal curves and involutes.

Multi view projection and drawing using first and third angle projection methods

Development of prisms, pyramids, cylinders and cones

Sections of solids and machine components

Types of pictorial views and drawing isometric view

Dimensioning techniques, size and geometric tolerance and their symbols, types of fits

Construction of curves from intersection of solids such as cones, cylinders, prisms and pyramids

Sketching of temporary and permanent fasteners like bolts, nuts and rivets, shaft couplings, connecting rod, bearings, pulleys, locking devices; Types of thread

Types of working drawing, construction of views of the assembled objects / components.

Construction of process flow diagrams; symbols for piping, instruments and equipment

### **Recommended book(s)**

#### **Text Books:**

1. David Madsen, Engineering Drawing and Design, 5<sup>th</sup> Edition, Cengage Learning, 2011

#### **Reference Books:**

1. Dennis K. Lieu, Sheryl A. Sorby, Visualization, Modeling, and Graphics for Engineering Design, 2<sup>nd</sup> Edition, Cengage Learning, 2016