كلية آشور الجامعة
Ashur University College

DEPT. OF MEDICAL DEVICES TECHNIQUES ENGINEERING **ACADEMIC YEAR: 2021-2022**

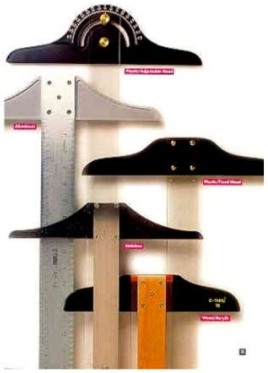
STAGE: FIRST **SUBJECT: ENGINEERING DRAWING** **INSTRUCTOR: ASSIT. PROF. SAAD ALKHFAJI**

Lecture 1: Overview of Engineering Drawing

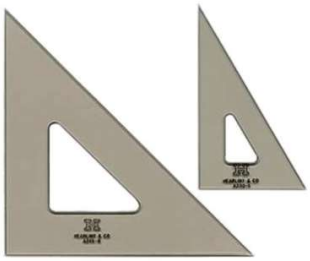
What is engineering drawing?

An engineering drawing is a type of technical drawing used for clearly defining the requirements for engineered items with scales.

DRAWING TOOLS:



1. T-Square



2. Triangles



3. Adhesive Tape



4. Pencils



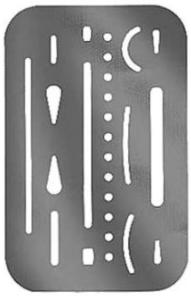
5. Sandpaper



6. Compass



7. Pencil Eraser



8. Erasing Shield

Types of Basic Engineering Lines

Visible line

Continuous thick line

Continuous thin line

Dimension line

Extension line

Leader line

Dash thick line

Hidden line

Chain thin line

Center line

Meaning of Lines:

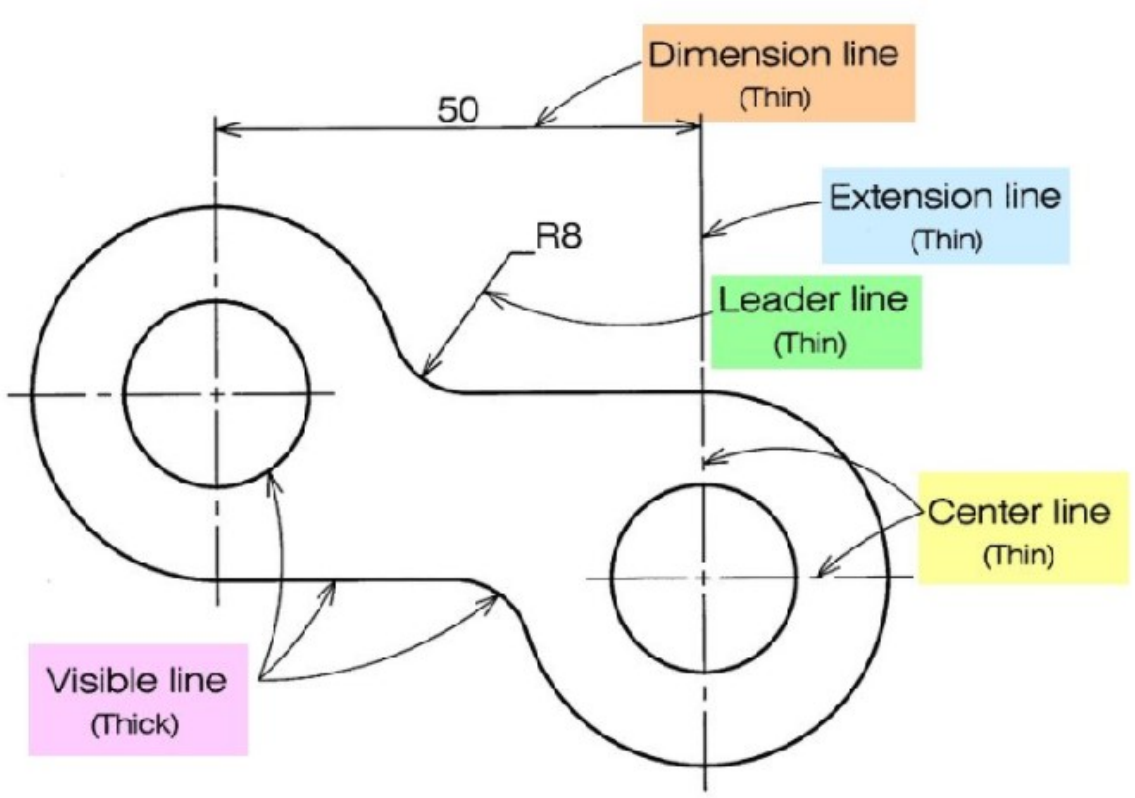
Visible lines represent features that can be seen in the current view.

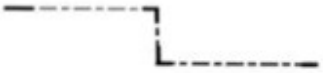
Hidden lines represent features that can not be seen in the current view.

Center line represents symmetry, path of motion, centers of circles.

Dimension and Extension lines indicate the sizes and location of features on a drawing.

Line conventions in engineering drawing:



Type	Line	Description	Application
A		Continuous THICK	Visible outlines, Visible edges.
B		Continuous THIN	Dimension lines, Projection lines, Leader lines, Imaginary lines of intersections, Outlines of revolved sections.
C		Continuous THIN Freehand	Boundaries of Limits of Partial or Interrupted views.
D		Continuous THIN Zig-Zag	Long break lines
E		Dashed THICK	Hidden outlines, Hidden edges.
F		Dashed THIN	
G		Chain THIN	Centre lines, Lines of Symmetry, Trajectories.
H		Chain THIN and THICK at ends & Changes of Direction	Cutting Planes
J		Chain THICK	Indication of lines or surfaces to which special treatment required.
K		Chain THIN Double Dash	Outlines of adjacent parts, Alternate and Extreme positions of movable parts, Centroidal lines, Initial outlines, Prior to forming.

Basic Line Types

Types of Lines	Appearance	Name according to application
Continuous thick line	———	Visible line
Continuous thin line	———	Dimension line Extension line Leader line
Dash thick line	— — — —	Hidden line
Chain thin line	—— - —— - ——	Center line

Table of the drawing sheet:

