

Subject : Engineering Drawing & Descriptive Geometry

Class : First year

Hours : 6hrs (Practical)

Objectives :

Introducing the fundamentals of engineering drawing to the student so that he can be qualified to express his thoughts, draw & execute the projects related to civil engineering.

Week	Syllabus
1	<ul style="list-style-type: none">• Introduction to defined the engineering drawing and introduction about AutoCAD software in engineering drawing• Windows setting, limits, grid, snap, object snap
2	<ul style="list-style-type: none">• Draw menu, line, polyline, ray, construction line• Polygon, arc, circle, rectangle, ellipse
3&4	<ul style="list-style-type: none">• Modify-part one• Modify -part two
5	<ul style="list-style-type: none">• Dimensions• Hatching
6	<ul style="list-style-type: none">• Text• Layers
7	<ul style="list-style-type: none">• Perspective• Ortho graphic projection
8	The first and third angle projection method
9&10	Draw the projection with the first angle projection method
11	<ul style="list-style-type: none">• Printing• Drawing the projection with the third angle projection method
12	<ul style="list-style-type: none">• Tools• Drawing the three projection with the first and third angle
13	Drawing the three projection with the first and third angle and see the difference between them
14&15	Finding third projection after knowing the other two projections
16&17	Draw Isometric after knowing two or three projection
18&19	Sectional theory, cutting projection drawing
20	Sectional theory, cutting projection drawing
21	Drawing section from defined sections
22	Draw partial section

23	Draw half section
24	Draw offset sections
25	Introduction about descriptive geometry
26	Projection of point
27	Representation of straight line
28	Projection of line and surface on auxiliary plane
29& 30	Section of bodies and determination of true shape of section

References:

- 1. Engineering Drawing (plan and solid geometry) / N.D.Bhatt**
- 2. الهندسة الوصفية / د يوسف نيقولا**
- 3. AutoCad 2009, 2D training manual / K.S.Kurland**
- 4. AutoCad user guide / <http://www.autodesk.com>**
- 5. الرسم الهندسي / هاشم عبود العيسوي و يوسف حسين الراضي**