

General engineering construction

Video 1- Draw polygon using universal method: SQUARE, PENTAGON & HEXAGON

<https://www.youtube.com/watch?v=8wb5qd-Pkv4&index=9&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 2- How to draw OCTAGON by UNIVERSAL method.

<https://www.youtube.com/watch?v=AxgHrUI62JQ&index=11&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 3- How to draw heptagon using universal method.

<https://www.youtube.com/watch?v=IHQryR2tYak&index=12&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 4- Draw a polygon by universal method.

<https://www.youtube.com/watch?v=wQceBqADpNM&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=18>

Video 5- Divide a line in to 'n' equal parts.

<https://www.youtube.com/watch?v=GOMaTldPn2q&index=19&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Engineering Curves

Video 6-Ellipse half by oblong and half by Arc of circle method with Normal & Tangent

<https://www.youtube.com/watch?v=rCYSQASg-9E&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=6>

Video 7-Ellipse half by oblong & half concentric circle method with Normal & Tangent

https://www.youtube.com/watch?v=Bj_FVCWhDHQ&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=7

Video 8-Ellipse by concentric circle method with Normal & Tangent

<https://www.youtube.com/watch?v=wf7wAdxBvD0&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=8>

Video 9- Draw an Ellipse having major axis 120 mm and minor axis 80 mm half by oblong and half by concentric circle method.

<https://www.youtube.com/watch?v=FQoaTh3WARE&index=16&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 10- Draw the cycloid of rolling circle diameter 40mm, also draw normal and tangent at any point on the curve.

<https://www.youtube.com/watch?v=Oi-YnKCxLrI&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=17>

Video 11- Draw Involute of a circle of 40 mm diameter, also draw normal and tangent at any point on the curve.

<https://www.youtube.com/watch?v=yxS3y8o7ZKE&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=2>

Projection of Point

Video 12- Draw projection of following points on common reference line keeping distance between their projectors is 20 mm.

<https://www.youtube.com/watch?v=eSrewkUgYj4&index=22&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Projection of Line

Video 13- Question: A line CD whose elevation is 65 mm and plan is 55 mm and one of the ends of the line is 15 mm above HP and 20 mm in front of VP. Draw its projection if its elevation is inclined at 15 degree to XY line.

<https://www.youtube.com/watch?v=0pJHnyUj0-E&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 14- A line CD whose elevation is 65 mm and plan is 55 mm and one of the ends of the line is 15 mm above HP and 20 mm in front of VP. Draw its projection if its elevation is inclined at 45 degree to XY line.

<https://www.youtube.com/watch?v=0pJHnyUj0-E&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX&index=5>

Video 15- A line AB 70mm long is inclined to HP by 60 degree and 30 degree inclined to VP. Point A is 10mm above HP and 25mm in front of VP. Draw it's Projection.

<https://www.youtube.com/watch?v=62tiPvnOrpc&index=10&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 16- The distance between the end projectors of the straight line PQ 55 mm. The elevation of the line is 65mm and plan is 75 mm. Draw its projections if end P of the line is 10 mm below HP and 25 mm behind VP.

<https://www.youtube.com/watch?v=Bqpc72WUsp0&index=20&list=PLJlraHljz-hCbbK3fj559krJ5c8hWkGX>

Video 17- A LINE AB 75 mm long is inclined at 45 degree to the HP and 30 degree to the VP. Its end A is 15 mm above HP and 25 mm in front VP. Draw above HP and 25 mm in front VP. Draw its projections.

<https://www.youtube.com/watch?v=-RHqvw0ZZQw&index=21&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX>

Projection of Plane

Video 18- A pentagonal plate of side 30 mm is held in VP on one of its corner. The edge opposite to that corner makes an angle of 25 degree with HP. The flat surface of the pentagon is inclined at 40 degree to the VP. Draw its projection.

<https://www.youtube.com/watch?v=5p9YQDneg14&index=4&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX>

Projection of Solid

Video 19- A hexagonal prism side of base 25 mm and height 55 mm is resting on one of the edge of its base on VP. with its axis inclined at 60 degree to VP.

<https://www.youtube.com/watch?v=ZqrHr4qV7Ws&index=3&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX>

Video 20- A circle of 50 dia. Rolls on the circum.. of another circle of 150 dia. Outside and inside of it. Trace the locus of a point on circum.. of a rolling circle for one complete revolution.

<https://www.youtube.com/watch?v=mGK2eHE1F34&index=13&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX>

Video 21- A cone base 45 mm diameter and axis 50 mm, it is resting on the HP on a point on its base circle with axis makes 30 degree to HP and 45 deg to VP when apex of the cone is nearer to the observer.

<https://www.youtube.com/watch?v=dUo2aAcjE9s&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX&index=14>

Video 22- A cylinder of base dia 40 mm and height 50 mm is resting on its rim of base on the VP with its axis inclined at 60 degree to the VP and elevation of axis inclined at 45 to the HP.

https://www.youtube.com/watch?v=jF6SaYx_kcg&index=15&list=PLJIraHIjIz-hCbbK3fj559krJ5c8hWkGX

Orthographic Projection Basics

Video 23-How to draw elevation, plan and side view in first angle and Third angle projection method. Multiview projection includes bottom view also.

<https://www.youtube.com/watch?v=AvtkQzvXOGc&index=23&list=PLJraHijz-hCbbK3fj559krJ5c8hWkGX>

Video 24- The first angle projection method. What is the position of Elevation Plan and side views with respect to XY line.

<https://www.youtube.com/watch?v=K4lrEpUmmxo&list=PLJraHijz-hCbbK3fj559krJ5c8hWkGX&index=24>