

EZ – STEEL STRUCTURE CONCEPTS

- ✓ **Shear Connection and Moment Connection Concepts**
- ✓ **Fixed and Pinned Supports Concepts**
- ✓ **Stability of the Structure**
- ✓ **Compression & Tension**
- ✓ **Resonance Basics**

- ✓ **Bending, Buckling, Minor Axis Buckling**
- ✓ **Vertical Bracing & Plan Bracing - Location, Numbers, Direction, Distance, Behaviour, Tension/Compression, Effect, Reactions, Temperature Effects**

- ✓ **Force Transfer Mechanism in Vertical Plane & Horizontal Plane**
- ✓ **Direction of Bracing in Truss**
- ✓ **Short cuts to calculate Value of forces in Truss members**

- ✓ **3D force Transfer Mechanism for Bridges, Pipe racks, Sheds, Technological Structures**

- ✓ **Orientation of the Member (Minor axis & Major axis), Orientation of Column, Beam, Bracing, Orientation of different Cross section, Location of Shear connections and Moment Connections, Direction of Support Fixidity**

- ✓ **Calculate CG of different c/s, I_{xx} , I_{yy} , Z-top, Z-Bottom**

- ✓ **Interacting ratio for Single force and Combined forces**
- ✓ **Code IS:800, Design of Axial Member (Compression & Tension), Design of Flexural Member, Design of Member with Combined Axial & Bending forces**

- ✓ **Project Drawings, Standard Drawings, Project Reports, Project EXCEL Templates**

- ✓ **Qualitative Analysis for Beams**
- ✓ **Qualitative Analysis for Frames (Rectangular & Triangular)**

- ✓ **EZ Assignments**
- ✓ **Site Visit**