

TRAINING PROGRAMS TENTATIVE SCHEDULE (ONLINE/OFFLINE)



Design and Construction of Pre-Engineered Buildings

- Overview of Pre-Engineered Buildings
- Structural Analysis & Design of Pre-Engineered Buildings
- PEB with Cranes, Component Designs and Installations
- Base Plate Design, Fabrication & Construction Issues in Pre-engineered Buildings
- Detailing Issues of Pre-Engineered Buildings

MAY/JUN

Connection Design of Steel Structures

- Bolted Connection – Type of bolts, Capacity of bolts in tension & shear
- Welded Connection – Type of welds, weld quality parameter, Weld testing, Capacity of weld in tension and shear, Weld symbols, Weld standards and detailing aspects.
- Design of Shear Connections, Moment Connections and connection for Torsion
- Concept of failure theory – Von-Mises Theory and Design of connection for Combined forces
- Design of a splice joint for a plate girder – Welded & Bolted with example
- Design of Connection of a joint for Open Web through type truss with example
- Design of Gusset plates with example
- Case study of failure due to improper design of joints

JUN/JULY

AUG/SEPT

Basics of Steel - Concrete Composite Construction & IS 11384:2022

- Overview of Composite Construction
- Steel-Composite Beam – Overview & Basic Design Consideration
- Design of Composite Deck Slab & Shear Connectors - Concept & New Code provision
- Design of Steel-Composite Column – Basic Design Consideration.
- Composite Construction in Structural Steel & Concrete - Case Study

OCT/NOV

Design of Steel Structures with latest Indian code

- Steel Properties, Applications, Products, Advantages & Issues in Steel Structure
- Section Properties and Tension Members Design
- Design of Compression Members
- Design of members under bending and shear
- Design of members with Combined forces
- Design of Connection
- Analysis & Design of General Building/ Industrial Building using STAAD Pro

DEC/JAN

Bolted Connection in Steel Structures: Design & Construction

- Introduction
- Workshop
- Detailing & Construction Issues
- Application of Software

FEB/MAR

New Trends in Steel Construction

- Structural sections (products and their properties)
- Steel-Concrete Composite Construction
- Steel Plate Shear Walls
- Castellated Beams
- Case Studies