IFS Academy
Training For The Future!!

Advanced TEKLA Structures (Steel) Design
Course Curriculum
(Duration: Classroom: 70 Hrs., Online: 60 Hrs.)

Chapter 1: Introduction to Tekla

    a. Overview of Tekla

    b. Understanding Environment, Role and Configuration

    c. Create model and save the file

    d. Graphical user interface

Chapter 2: Modelling in Tekla Basic

    a. Tekla Structures basic tools and commands

    b. Use of Snaps and Level of detail in Tekla

    c. Insertion of Reference Models

    d. Grid generation in an example project in Tekla

    e. Creation of Levels in Tekla

Chapter 3: Concrete Modelling

    a. Isolated Footing generation part 01

    b. Isolated Footing generation part 02

    c. Creation of piles in Tekla

    d. Creation of strip footings in Foundation with Tekla

    e. Creation of Slab and discount of materials in Tekla

    f. Creation of Structural Columns in Tekla

    g. Creation of concrete beams in Tekla

Chapter 4: Steel Modelling

    a. Creation of Steel Columns in Tekla

    b. Creation of steel beam in Tekla – Single beam, polybeam, curved beam, twin profile, orthogonal beam

    c. Create plate, bent plate

    d. Welding

    e. Bolting

Chapter 5: Assembly and Part Details

    a. Modelling detail connection between steel parts

    b. Modifying and editing connection

    c. Understanding what is part and assembly details

    d. Assembly components

e. Detecting and fixing clashes

Chapter 6: Various types of Connections

    a. Base plate connection

    b. Column to beam moment connection

    c. Column to beam shear connection

    d. Beam to beam shear connection

    e. Stair

Chapter 7: Pre Engineered Building

    a. Components of PEB

    b. Bracing

    c. Purlin connection

    d. Bracing connection

Chapter 8: Numbering and Detailing

    a. Detailing views

    b. Generation of 2D drawings plans, elevations and detail views

    c. Numbering of main parts and assembly parts

    d. Single Part drawings and assembly drawings

Chapter 9: Managing drawings

    a. Revising and updating

    b. Working with templates

    c. Printing drawings

    d. Working with NC files

Chapter 10: BOQ

    a. Understanding detail bill of quantities

    b. Exporting BOQ files

Chapter 11: Precast Modelling

    a. Column to beam connection

    b. Beam to beam connection

    c. Precast hollow core slab

    d. Precast miscellaneous components

Chapter 12: Rebar Modelling

    a. Rebar in slab

    a. Rebar in beam and column

    b. General rebar detailing