BIM Diploma content (included courses) :

Training course	Duration
Steel design technical course	12 hrs
Tekla structures	32 hrs
Stadd pro	32 hrs

Step 1 Steel design technical course

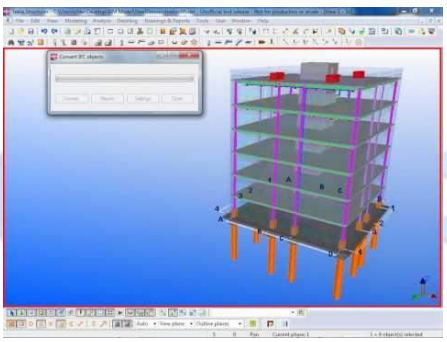
Training course will include design elements of steel constructions using the allowable stresses. Where design sectors will be exposed to tensile stresses and shear, compression and bending. As well as columns exposed to axial loads and sectors prone to moments and axial forces of design. The course will also include design rules and rail links rivets and welding.

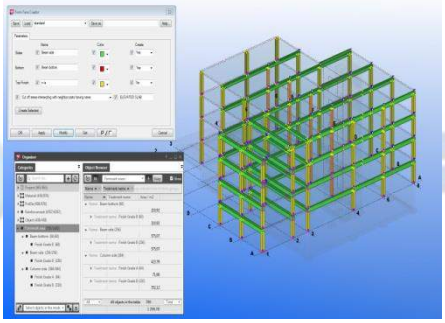
Step 2 Tekla structures

This comprehensive course will teach you how to model, Analyse and design steel and concrete buildings effectively using Tekla® Structural Designer. Referencing your existing knowledge, you will gain a full understanding of how to model with physical objects and undertake gravity and lateral design. In addition you will grasp the many useful shortcuts that our experts use daily.

Step 3 Stadd pro

STAAD.Pro is the structural engineering professional's choice for steel, concrete, timber, aluminum, and cold-formed steel design of virtually any structure including culverts, petrochemical plants, tunnels, bridges, piles, and much more through its flexible modeling environment, advanced features, and fluent data collaboration





Steel design technical course

Course duration : 12 Hrs

Summary of course :

training course will include design elements of steel constructions using the allowable stresses. Where design sectors will be exposed to tensile stresses and shear, compression and bending. As well as columns exposed to axial loads and sectors prone to moments and axial forces of design. The course will also include design rules and rail links rivets and welding.

Objectives of the course:

After the training that the student be able to:

· Understand the ways design using the principle of the allowable stresses.

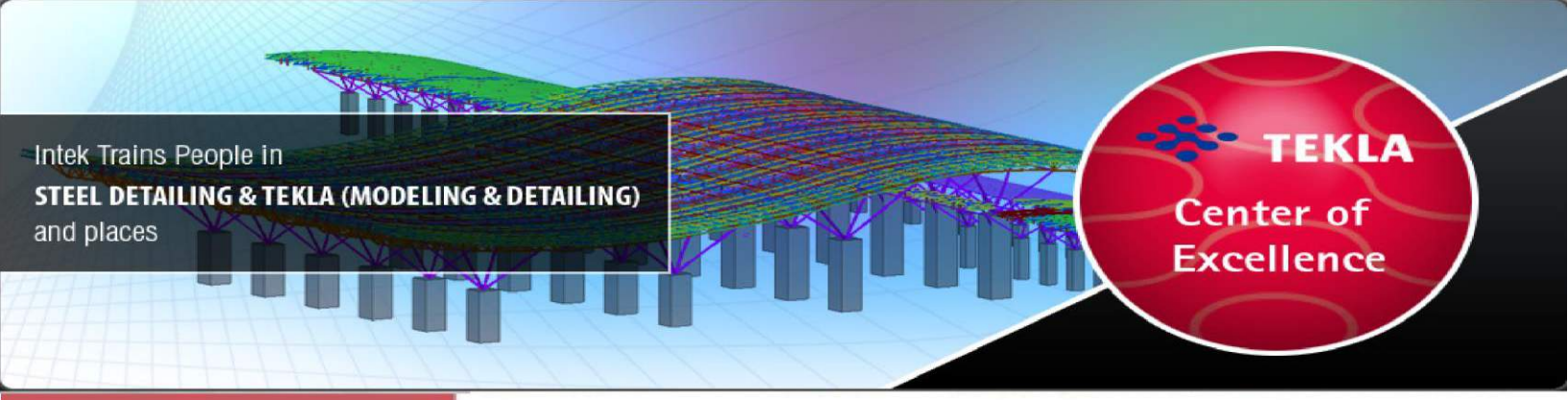
· Analysis of loads and the various design elements of the steel beams and columns and forums.

· Design links of bolts and welding the various elements of the steel elements .

· preparation of design elements , sectors and links.

we will also gain basic skills about :

steel properties - the types of loads - design philosophy in a way stresses permitted - Analysis and design elements under strong tensile and pressure - columns loads - basis base - design beams exposed to shear forces and bending moments - beams covered panels - bending asymmetric - marbling - Design- sectors the moments and axial forces - links and nails welded joints - applications using the computer to design mineral sectors and links.



Tekla structure :

This comprehensive course will teach you how to model, analyse and design steel and concrete buildings effectively using Tekla® Structural Designer. Referencing your existing knowledge, you will gain a full understanding of how to model with physical objects and undertake gravity and lateral design. In addition you will grasp the many useful shortcuts that our experts use daily.

Training courses :

course	Duration hrs
Tekla structure training course	32

- Modelling of all parts.
- Modelling of automatic connections for the steel structure and cold rolled systems.
- Modelling of simple user defined connections.
- Navigation of the modeling environment and visualization of the model.
- Creation of assembly and single part drawings (including simple drawing settings).
- Creation of general arrangement drawings.
- Generation of material reports and bolt listings.
- Generation of CNC files and cold rolled data.
- Issuing procedure for models and management of drawings.
- User attributes and how to use them.
- Phasing and Lotting.
- Simple drawing templates.
- Basic interoperability with other modeling and design software.

STAAD.Pro

The World's # 1 Structural Analysis and Design Software

STAAD PRO :

STAAD.Pro is the structural engineering professional's choice for steel, concrete, timber, aluminum, and cold-formed steel design of virtually any structure including culverts, petrochemical plants, tunnels, bridges, piles, and much more through its flexible modeling environment, advanced features, and fluent data collaboration.

course	Duration hrs
STAAD PRO training course	32

Outline :

- Describe the significance of the software
- Proficient in 2D/3D geometry creation methods
- Implement useful functions, properties, constants, supports, and specifications to complete the geometry
- Ways of creating load with manual and automatic combinations for floor, area, plate, wind, and moving loads.
- Isometric and perspective views with 3D shapes.
- Customize structural templates for creating a model.
- Elaborate methods of analysis
- Supports concrete and steel designs covering curvilinear beams, linear and non-linear cables.
- Rectangular and cylindrical coordinate systems with mix and match capabilities