

## **Staad.Pro Workshop**

Staad.pro is a computer aided analysis and design software used to solve the multistory structures indeterminacy in few seconds by dividing the entire structure into elements with most accuracy. Various types of structures such as concrete steel etc., can solve most economical way of designing can achieve by using staad.pro software.

### **Key Benefits:**

We will provide knowledge in the field of designing and drawing by giving them an overview of all the tools and introducing them to the needs of the current industry.

### **Syllabus:**

**Session 1: Introduction to Staad.Pro:** introduction(what is structural engineering ? what is structure? what is Analysis? what is Design?), Started with Staad.Pro, Elements of the STAAD.Pro Screen, Introduction to Staad Editor.

**Session 2: Structure Geometry & Coordinate System:** model generation in staad.Pro, method of creating the model, Structure Wizard, Model Editing Tools(Like Add beam, insert node, cut section, add plate view mode etc.), coordinate systems.

**Session 3: Specification and Property:** member property, support specification, material specification, material property, group specification.

**Session 4: Loads and Load Combinations;** type of loads, calculation of live load, dead load, wind load, seismic load according to relevant IS code, how to implement them in structure, generate load combinations.

**Session 5: Analysis:** analysis the structure, viewing the output(shear forces, support reactions, bending moment, stress distribution, animated shape etc.)

**Session 6: Design:** general guideline for design, R.C.C. design as per IS 456. (beams, columns and slabs), steel design as per IS 800, staircase design, slab design.

**Session 7:** Report Setup and Detailed Engineering Drawing: viewing the output files of design, print specifications, preparing structural drawings.

