STAAD. Pro V8i

Course Description

STAAD is a popular structural analysis application known for analysis, diverse applications of use, interoperability, and time-saving capabilities. STAAD helps structural engineers perform 3D structural analysis and design for both steel and concrete structures.

A physical model created in the structural design software can be transformed into an analytical model for structural analysis. Many design code standards are incorporated into STAAD to make sure that the structural design complies with local regulations.

Instructional Methodology

This course is a self-guided online and offline course. Students have 15 Days to complete the curriculum but may work at their own pace throughout the course. Lessons are presented in written format, video formatand have a hands-on assignment at the end of each learning module.

Course Content

Section 1

- Introduction to STRUCTURAL ENGINEERING
- Introduction to STAAD.Pro.V8i
- Getting familiar with STAAD window
- Model generation using STAAD editor

Section 2

- Introduction to Snap Node/Beam Editor
- Model generation using Node/Beam Editor
- Introduction to Translational Repeat

- Model generation using Translational Repeat

Section 3

- Assigning Properties
- Assigning Supports
- Assigning Loads
- Structure Analysis

Section 4

- Simply Supported Beam
- Analysis of Framed Structure
- Applying Floor Loads

Section 5

- Wind Analysis
- Seismic Analysis
- Creating Load Combinations

Section 6

- Dynamic Analysis
- Response Spectrum Analysis
- Introduction to FEM
- Analysis of Framed Structure Including Slabs

Section 7

- Column & Beam Design
- Reinforced Concrete Design

Section 8

- Slab Design
- Circular Water Tank
- Design Rectangular Water Tank Design
- Moving Loads

Section 9

- Staircase Analysis
- Steel Design
- Pushover Analysis

Section 10

- Shear Wall Design
- Lift Room Modeling

Section 11

- Transmission Line Tower
- Bridge Deck Design Using STAAD.Beava