**Techno India NJR Institute of Technology**

(Department of Civil Engineering)

**Schedule of the course: STAAD Pro**

|  |  |  |
| --- | --- | --- |
| **Day** | **Brief details** | **Contents** |
|  | Getting started | Overall approach to the software - Introduction |
| 1 | Overview of the STAAD.Pro environment, Keyboard shortcuts, Documentation, Member local and global axis, etc |
| 2 | Modelling | Creating model objects, Properties and specifications, Supports, etc. |
| 3 | Overview of the IS Codes | IS 875 (Part 1 & 2) – For calculation of Dead load and Live load – Application of load in STAAD.Pro |
| 4 | Overview of the IS Codes | IS 875 (Part 1 & 2) – For calculation of Dead load and Live load – Application of load in STAAD.Pro |
| 5 | Overview of the IS Codes | IS 875 (Part 3): 2015 – For wind force estimation for low rise and tall structures – Application of load in STAAD.Pro |
| 6 | Overview of the IS Codes | IS 875 (Part 3): 2015 – For wind force estimation for low rise and tall structures – Application of load in STAAD.Pro |
| 7 | Overview of the IS Codes | Overview of the IS Codes: Limit state design as per IS 800:2007 – part 2 – Features available in STAAD.Pro |
| 8 | Loads | Load application for Dead load, Live load, Wind load, Seismic load, etc., Create load list, load combinations, etc. in STAAD.Pro |
| 9 | Analysis & Interpretation of results | Types of analysis, Pre-analysis commands, To check for soft stories and seismic code irregularities, etc.Statics check, deflected shape, mode shapes, etc. |
| 11 | Design | Concrete design in STAAD.Pro – Understanding of each design parameter and its impact on the design |
| 12 | Project | Analysis and Design Ground plus one story residential building |
| 13 | Project | Analysis and Design Ground plus one-story residential building |
| 14 | Report  | Documents preparation for project |
|  |  |  |



Dr. Pankaj Porwal

Principal and Head,

Department of Civil Engineering and Mechanical Engineering

CC:1. The Director

2. The Principal

3. CE Dept. File

4. CE student notice boards