

Advanced Etabs Workshop

Training program

Course Description

Etabs is a computer aided analysis and design software used to solve the multistoried structures indeterminacy in few seconds by dividing the entire structure into objects with most accuracy, various types of structures such as concrete etc., can solve most economical way of designing can achieve by using CSI Etabs

The course content helps you to design a ground + 30 storied building with a varied types of elements such as flat slabs, raft slabs, shear wall, design independently with full concept oriented programs will guide you check the structural output will manual design checks.

Modeling

- Introduction
- Objective
- File operation
- Etabs window / floor information
- Creating basic grid systems
- Creating structural model
- Defining storey data
- Add structural objects using templates/manually
 - Drawing of point, line and area objects
 - Reference lines and planes
- View, Selection & Options
 - View Management
 - Object Selection
 - Options and preferences
- Assign model properties for beams/ columns/slabs /shear wall/ flat slab & raft slabs.

- **Load case**

- Objective
- Define static load case assignment
 - Point object assignments
 - Line object assignments
 - Area object assignments
 - seismic loads
 - wind loads
- Self weight multiplier
- Modify an existing static load case
- Delete existing static load case
- Load combination

- **Analysis the model**

- Model analysis with various combination for both Gravity/ Horizontal loads
 - Analysis options
 - Analysis log
- Locking and unlocking the model

- **Results & Graphical Output(analysis output)**

- Study of Bending, shear & torsion for Beam members
- Study of Axial load & Bi axial moments for Column members
- Study of Deformation of nodes and deflection of various structural members.
- Check for overall stability of the structure.

- **Editing**

- Cut, copy and paste
- Replicate
- Frame and area meshing
- Point and line extrusion

- **Text Input and File Export/Import**

- Text input file
- Export options
- Import options

- **Design1**

- Assigning design parameters as per I.S 456
- Study of Design summary results in terms of percentage of reinforcement.
- Study of detail results for an individual members
- Study of Design report for each structural component like (Footing, Column, and Beam /shear wall).
- For flat slab/ raft slab design export the data to CSI SAFE.
- Check for punching and bending for raft and flat slab using CSI SAFE.
- How to assign the data for various elements like (footings, columns and beams) to the R.C.C detailer.

- **Preparation of Design Reports**

- Details result summary for
- Geometry
- Load cases & Combination
- Design summary for columns, beams.
- Reactions for footings.