

# ADVANCED RCC STRUCTURAL DESIGN -1 SEISMIC MANUAL, ETABS AND FOUNDATION IN SAFE [AT005]

## **SPECIALITIES IN THIS TRAINING**

- SP INSTITUTE Since 2011 owned by SP STRUCTURES (Civil & Structural Consultancy), Chennai.
- SP INSTITUTE Chief Executive Er.P.Sabarinathan (Trainer) Student of Prof. A.R.Santhakumar IIT(M)
- Unlimited Period of Training
- Experience Certificate
- Govt. of INDIA New UDAYAM MSME Registration UDAYAM- TN-02-0027071
   Certificate
- Placement reference for Students/Engineers
- SP STRUCTURES office environment exposure.

## **ETABS**

- Tips to Tricks on Seismic Analysis interpretation based on SP STRUCTURES office environment
- Understand the Seismic behaviour of RCC Elements and Structures as per IS 1893

**Manual -Pre Engineered Building World** Concept on Wind Load as per IS 875 Part- 3: 2015

Handy Exercise on PEB Structural Elements such as Frame, Purlin and Girts

## SAFE

- SP STRUCTURES office Design Assignments
- In the blink of eye Magical experience will be ensured
- Shortcuts in the Software

## SOFTWARE LICENSES

The Latest software owned by SP INSTITUTE

ETABS

SAFE

H.O: # 5, Il Floor, I Street, Seetha Nagar, Nungambakkam, Chennai- 600034. Mob: +919787075645 Ph: 044 28242412/ 79647041

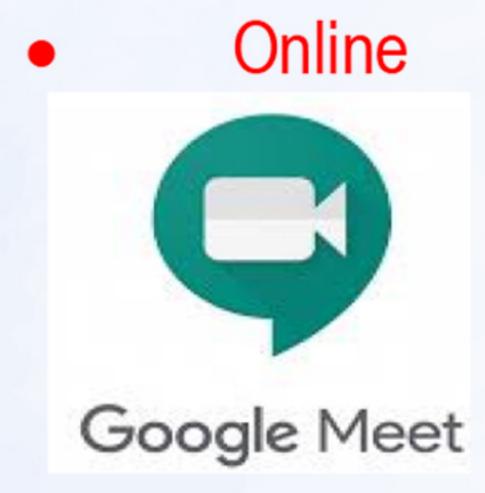


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## **MODE OF TRAINING**

At Respective Training Center (Offline)





## INSTRUCTIONS

1.Students/ Engineers must bring their own laptop, pen drive mouse etc.,

2. The Internet Speed must be Good

SPETINS II TUTE
Learn Practising Design

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## SESSIONS

#### SEISMIC CALCULATION AS PER IS 1893 Part -1 2016 ON PRACTICAL PROBLEM

- a. SEISMIC WEIGHT EXCLUSIVELY AS PER IS 1893
- b. SESIMIC ZONE CLASSFIFICATION
- c. TIME PERIOD FOR DIFFERENT BUIDLING AND ITS HEIGHT
- d. DESIGN BASE SHEAR
- e. DISTRIBUTION OF BASE SHEAR ON EACH FLOOR

### ETABS APPLICATION AS PER IS 1893

- a. TAKE UP EXISTING NON SEISMIC MODEL (PRACTICAL PROBLEM)
- b. DIAPHGRAM ASSIGNMENTS
- c. SEISMIC LATERAL LOAD APPLICATION
- d. DESIGN BASE SHEAR COMPARISON ON MANUAL AND ETABS ASSIGNMENT
- e. DRIFT CHECK ON EACH STOREY
- f. BASE REACTIONS
- g. BEHAVIOUR OF STRUCTURE IN ANIMATED VIEW

### SAFE AS PER IS 456

### ISOLATED FOOOTING, COMBINED FOOTING, COMBINED WITH STRAP

- a. EXPORT REACTIONS FROM PRACTICAL ETABS MODEL TO SAFE
- b. CHECK THE ETABS FORCE IN SAFE
- c. SIZE OF FOOTING ARRIVAL AS PER SBC
- d. DEFINITION OF MATERIAL BOTH CONCRETE AND STEEL
- e. MODELLING ISOLATED FOOITNG / IMPORT FROM AUTO CAD
- f. DEFAULT MODEL LOAD APPLICATION AND LOAD COMBINATIONS
- g. FINITE ELEMENT ANALYSIS/ STRIP ANALYSIS METHOD
- h. DEISGN OF MODEL ON FINITE ELEMENT/ STRIP METHOD
- i. SBC CHECK/SHEAR CHECK

#### PRE ENGINEERING BUILDING WORLD

- a. WIND LOAD AS PER IS 875 PART -3 LATEST CODE
- b. WIND LOAD APPLIACTION ON PEB FRAME, PURLIN, GIRTS AND BRACING

### PRACTICAL THUMB RULE FOR SEISMIC STRUCTURAL DESIGN

#### DISCUSSIONS ON IS CODES

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