

Department of Civil Engineering

KIET Group of Institutions, Ghaziabad

Department of Civil Engineering

Summary Report of Winter School on Computer Aided RCC Building Analysis and Design Using E TAB & SAFE Software c

from 24 December to 31 December 2016

ETABS from Computers & Structures Inc. (CSI) is the ultimate integrated software package for the structural analysis and design of buildings. Incorporating 40 years of continuous R&D, ETABS offers unmatched 3D object based modeling and visualization tools, blazingly fast linear and nonlinear analytical power, sophisticated and comprehensive design capabilities for a wide-range of materials, and insightful graphic displays, reports, and schematic drawings that allow users to quickly and easily decipher and understand analysis and design results.

SAFE software is mostly used in designing foundation slab systems and concrete floors. SAFE is a comprehensive package that combines all the aspects of engineering design process – from creating layout to detail drawing production in a single, intuitive environment.

Day-Wise Schedule	Course Content
Day-1 / Session 1 Duration two (2) Hours	Introduction to Etabs Basics <ul style="list-style-type: none">• Exploring the user Interface• Working with Etabs Elements• Setting up A Project
Day-1 / Session 2 Duration two (2) Hours	Working With Grid <ul style="list-style-type: none">• Creating a basic Grid System• Grid Dimensions (Plan) – Define a Grid System
Day-2 / Session 3 Duration two (2) Hours	Creating a Structural Model <ul style="list-style-type: none">• Start Model with Template• Define Story Data• Add Structural Objects Using Templates• Add Structural Objects Manually
Day-2 / Session 4 Duration two (2) Hours	Creating a Structural Model <ul style="list-style-type: none">• Draw Columns• Draw Beams• Draw Secondary (Infill) Beams• Draw the Floor

Day-3 / Session 5 Duration two (2) Hours	Working with General Properties <ul style="list-style-type: none"> • Define Material Properties • Assign/Change Properties • Define Member Sections
Day-3 / Session 6 Duration two (2) Hours	Working with Selection Options <ul style="list-style-type: none"> • Menu Methods of Selecting Objects • Deselect Command • Get Previous Selection Command • Clear Selection Command
Day-4 / Session 7 Duration two (2) Hours	Define Load Cases and Assign Loads <ul style="list-style-type: none"> • Copying and Monitoring Elements • Load the Structural Model • Structural Loads • Define the Static Load Case Name
Day-4 / Session 8 Duration two (2) Hours	Define Load Cases and Assign Loads <ul style="list-style-type: none"> • Self-Weight Multiplier • Modify an Existing Static Load Case • Delete an Existing Static Load Case • Assign Structural Loads
Day-5 / Session 9 Duration two (2) Hours	Model Analysis
Day-5 / Session 10 Duration two (2) Hours	Design the Structure
Day-6 / Session 11 Duration two (2) Hours	Analysis and Design Results <ul style="list-style-type: none"> • Generate Results
Day-6 / Session 12 Duration two (2) Hours	Earthquake Analysis Study
Day-7 / Session 13 Duration two (2) Hours	Working with other data formats <ul style="list-style-type: none"> • CSiXRevit (Data Exchange) • CsiXACAD (Data Exchange to CAD)
Day-7 / Session 14 Duration two (2) Hours	Performance Based Design

Day-7 / Session 15
Duration two (2) Hours

Response Spectrum Analysis

A pilot project completed by each candidate at the completion of each course.

After doing this course, the candidate is able to do analysis of concrete shear walls and concrete moment frames. He is able to do static and dynamic analysis of multi-storey frame and shear wall buildings.

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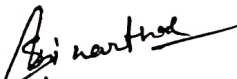
DEPARTMENT OF CIVIL ENGINEERING
KIET, GHAZIABAD

Winter School on Computer Aided RCC building Analysis and Design using E Tabs & SAFE
Softwares on 24/12/2016 & 31/12/2016

Attendance Sheet of 24/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh verma
4	1402900084	RASHID SHAMIM	3	Rashid shamim
5	1402900110	SHUBHAM SINGH	3	Shubham
6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	Mayank Singh
8	1402900050	GARIMA SINGH	3	Garima
9	1402900060	MANSI PATHAK	3	Mansi
10	1302900087	RAJ VARDHAN SINGH	4	Raj vardhan
11	1302900058	KRISHNA VARDHAN	4	Krardhan
12	1302900098	SAURABH SRIVASTAVA	4	Saurabh
13	1402900033	ASHISH VARSHNEY	3	Ashish varshney
14	1302900069	PANKAJ MOULEKHI	4	Pankaj mouleki
15	1502900074	NIRJHAR JOSHI	2	Nirjhar
16	1502900025	ANKIT DUBEY	2	Ankit


HOD, CE


Mr. Vijay Lokesh Singh & Mr. Sidhartha Kumar

Winter School Coordinator

DEPARTMENT OF CIVIL ENGINEERING

KIET, GHAZIABAD

Winter School on Computer Aided RCC building Analysis and Design using E Tabs & SAFE Softwares on 24/12/2016 & 31/12/2016

Attendance Sheet of 26/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh Verma
4	1402900084	RASHID SHAMIM	3	Rashid Shamim
5	1402900110	SHUBHAM SINGH	3	Shubham
6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	Mayank Singh
8	1402900050	GARIMA SINGH	3	Garima
9	1402900060	MANSI PATHAK	3	Mansi
10	1302900087	RAJ VARDHAN SINGH	4	Raj vardhan
11	1302900058	KRISHNA VARDHAN	4	K. vardhan
12	1302900098	SAURABH SRIVASTAVA	4	Saurabh
13	1402900033	ASHISH VARSHNEY	3	Ashish varshney
14	1302900069	PANKAJ MOULEKHI	4	Pankaj moulechi
15	1502900074	NIRJHAR JOSHI	2	Nirjhar
16	1502900025	ANKIT DUBEY	2	Ankit

Singh
HOD, CE

Vijay & *Sidhartha*
Mr. Vijay Lokesh Singh & Mr. Sidhartha Kumar
Winter School Coordinator


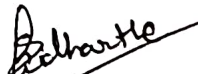
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Attendance Sheet of 27/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh Verma
4	1402900084	RASHID SHAMIM	3	A
5	1402900110	SHUBHAM SINGH	3	Shubham
6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	Mayank Singh
8	1402900050	GARIMA SINGH	3	Garima
9	1402900060	MANSI PATHAK	3	Mansi
10	1302900087	RAJ VARDHAN SINGH	4	Raj vardhan
11	1302900058	KRISHNA VARDHAN	4	K. Vardhan
12	1302900098	SAURABH SRIVASTAVA	4	Saurabh
13	1402900033	ASHISH VARSHNEY	3	Ashish Varshney
14	1302900069	PANKAJ MOULEKHI	4	Pankaj Moulekh
15	1502900074	NIRJHAR JOSHI	2	Nirjhar
16	1502900025	ANKIT DUBEY	2	Ankit


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Winter School Coordinator


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Attendance Sheet of 28/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
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4	1402900084	RASHID SHAMIM	3	Rashid shamim
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6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	Mayank singh
8	1402900050	GARIMA SINGH	3	Garima
9	1402900060	MANSI PATHAK	3	Mansi
10	1302900087	RAJ VARDHAN SINGH	4	A
11	1302900058	KRISHNA VARDHAN	4	Krishna
12	1302900098	SAURABH SRIVASTAVA	4	Saurabh
13	1402900033	ASHISH VARSHNEY	3	Ashish varshney
14	1302900069	PANKAJ MOULEKHI	4	Pankaj moulekh
15	1502900074	NIRJHAR JOSHI	2	A
16	1502900025	ANKIT DUBEY	2	Ankit


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Attendance Sheet of 29/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh Verma
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6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	Mayank Singh
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9	1402900060	MANSI PATHAK	3	Mansi
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Attendance Sheet of 30/12/2016

S.No.	Roll No.	Name	Year	Sign
1	1402900079	PRATEEK BHARDWAJ	3	Prateek
2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh Verma
4	1402900084	RASHID SHAMIM	3	Rashid Shamim
5	1402900110	SHUBHAM SINGH	3	Shubham
6	1502900907	GAURAV RASTOGI	3	Gaurav
7	1402900062	MAYANK KUMAR SINGH	3	A
8	1402900050	GARIMA SINGH	3	Garima
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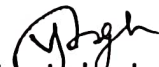

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Attendance Sheet of 31/12/2016

S.No.	Roll No.	Name	Year	Sign
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2	1402900073	NISHANT SINGH	3	Nishant
3	1502900917	UTKARSH VERMA	3	Utkarsh Verma
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9	1402900060	MANSI PATHAK	3	Mansi
10	1302900087	RAJ VARDHAN SINGH	4	Rajvardhan
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12	1302900098	SAURABH SRIVASTAVA	4	Saurabh
13	1402900033	ASHISH VARSHNEY	3	Ashish Varshney
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Department of Civil Engineering

Report on Summer School

3D Modelling & Computer Simulation of Structures Using Revit Software

from 10 July to 14 July 2017

Autodesk Revit Structure software is the **Building Information Modeling (BIM)** solution for structural engineering firms. More effectively streamline the process from design through detailing to fabrication, and connect design and analysis using the integrated multi-material physical model and independently editable analytical model.

This course aims to make the participants productive by giving them the ability to produce drawings and redefine images of buildings. Also, it will help engineers to navigate user interface, architectural objects such as floor, walls, roofs, windows, and stairs covering the basics of Revit Architecture. This course will assist in the creation of schematic design.

Day-Wise Schedule	Course Content
<p>Day-1</p> <p>Date:10/7/17 Day: Monday Time: 9:30 AM to 12.30 PM Duration (3) Hours</p>	<p>Introduction to BIM and Autodesk Revit Building Information Modeling Overview of the User Interface Standard terminology</p> <p>Starting a New Project</p> <p>Working with Grids & Levels</p> <ul style="list-style-type: none">• Placing and editing Levels• Placing and editing Grids <p>Working with Architectural Modeling Creating & Placing Basic Wall Viewing Commands</p>

<p>Day-1</p> <p>Date:10/7/17 Day: Monday Time: 1:30 AM to 4.30 PM Duration (3) Hours</p>	<p>Placing and Editing Doors Placing and Editing Windows Working with Roof</p> <p>Basic Modify commands</p> <ul style="list-style-type: none"> • Align • Offset • Trim / Extend • Move / Copy • Array • Mirror • Split
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Day-Wise Schedule	Course Content
<p>Day-2</p> <p>Date:11/7/17 Day: Tuesday Time: 9:30 AM to 12.30 PM Duration (3) Hours</p>	<p><u>Working with Structural Components</u></p> <p>Working with Structural Column Loading, Placing and Modifying Structural Columns.</p> <p>Working with Structural Framing / Beams Placing and Modifying Structural Beam Working with Beam System</p>
<p>Day-2</p> <p>Date:11/7/17 Day: Tuesday Time: 1:30 AM to 4.30 PM Duration (3) Hours</p>	<p>Working with different types of Footings</p> <p>Working with Structural Floor Sketching Structural Floor Editing Slab (Sketch Mode)</p> <p>Working with Opening</p> <p>Creating Sectional View</p>

<p>Day-3</p> <p>Date:12/7/17 Day: Wednesday Time: 9:30 AM to 12.30 PM Duration (3) Hours</p>	<p>Working with Reinforcement Reinforcement Using Plug-ins Manual reinforcement by placing available Shape Code Manual Reinforcement using sketching</p> <p>Beam Detailing Column Detailing</p>
<p>Day-3</p> <p>Date:12/7/17 Day: Wednesday Time: 1:30 AM to 4.30 PM Duration (3) Hours</p>	<p>Footing Detailing</p> <p>Area Reinforcement</p> <ul style="list-style-type: none"> • Rebar for Slab /Wall <p>Path REINFORCEMENT (for opening and corners)</p>

Day-Wise Schedule	Course Content
<p>Day-4</p> <p>Date:13/7/17 Day: Thursday Time: 9:30 AM to 12.30 PM Duration (3) Hours</p>	<p>Working with Staircase Stair by sketch</p> <p>Converting Architectural Staircase to Structural Staircase</p> <p>Rebar Placement by sketching for Stair</p> <p>3-D Rebar (SOLID)</p> <p>Providing Color to Rebar</p> <p>3D-Section</p>
<p>Day-4</p>	<p>Construction Documentation</p>

<p>Date:13/7/17 Day: Thursday Time: 1:30 AM to 4.30 PM Duration (3) Hours</p>	<ul style="list-style-type: none"> • Creating and formatting Schedule • Working with Different Views • Callouts (Detail Views, Drafting Views, etc...) • Working with Annotation • Creating Sheets
<p>Day-5</p> <p>Date:14/7/17 Day: Friday Time: 9:30 AM to 12.30 PM Duration (3) Hours</p>	<p>Family Concept & Techniques Creating Family (Library)</p>
<p>Day-5</p> <p>Date:14/7/17 Day: Friday Time: 1:30 AM to 4.30 PM Duration (3) Hours</p>	<p>Working with CAD file. Working with Revit Architectural file.</p>

A pilot project completed by each candidate at the completion of each course.

After doing this course, the candidate is able to learn how to use the Revit software in any practical problem. The students is able to navigate user interface, architectural objects such as floor, walls, roofs, windows, and stairs covering the basics of Revit Architecture.

Jeingh
HOD, CE

KIET GROUP OF INSTITUTIONS, GHAZIABAD

Department of Civil Engineering

Summer school on 3D MODELLING & COMPUTER SIMULATION OF STRUCTURES USING REVIT SOFTWARE from 10 to 14 July 2017

S.no.	Roll.No.	Name	Year	10/7/2017	11/7/2017	12/7/2017	13/7/2017	14/7/2017
1	1502900003	ABHIJEET VERMA	2	Abhijeet	Abhijeet	Abhijeet	Abhijeet	Abhijeet
2	1502900004	ABHIMANYU KUMAR SINGH	2	Abhimanyu	Abhimanyu	Abhimanyu	Abhimanyu	Abhimanyu
3	1502900008	ABHISHEK DIXIT	2	Abhishek	Abhishek	A	Abhishek	Abhishek
4	1502900011	ABHISHEK KUMAR	2	Abhishek	Abhishek	Abhishek	Abhishek	Abhishek
5	1502900021	AMIT KUMAR VERMA	2	A	Amit	Amit	A	Amit
6	1502900025	ANKIT DUBEY	2	Ankit	A	Ankit	Ankit	A
7	1402900027	ANUJ SINGH	3	Anuj Singh	Anuj Singh	Anuj Singh	Anuj Singh	Anuj Singh
8	1502900038	BOBY SHARMA	2	Boby	A	Boby	Boby	Boby
9	1602900913	MANENDRA YADAV	2	Manendra	Manendra	Manendra	Manendra	A
10	1502900074	NIRJHAR JOSHI	2	Nirihar	Nirihar	A	Nirihar	Nirihar
11	1502900076	NISHA YADAV	2	Nisha	Nisha	Nisha	Nisha	Nisha
12	1402900090	ROHIT SINGH	3	A	Rohit	Rohit	Rohit	A
13	1402900101	Saurav Bhardwaj	3	Saurav	Saurav	Saurav	A	Saurav
14	1502900112	SWAPNIL TIWARI	2	Swapnil	Swapnil	Swapnil	A	Swapnil
15	1402900121	Vinay Singh	3	Vinay Singh	Vinay Singh	A	Vinay Singh	Vinay Singh
16	1302900081	RAHUL KUMAR	4	A	Rahul	Rahul	Rahul	Rahul
17	1302900088	RAVI PAL SINGH	4	Ravipal Singh	Ravipal Singh	Ravipal Singh	Ravipal Singh	Ravipal Singh
18	1447300046	MUKESH KUMAR	3	Mukesh	Mukesh	Mukesh	Mukesh	Mukesh
19	1447300078	SATYAM SINGH	3	Satyam	A	Satyam	Satyam	Satyam

Mr. Vijay Lokesh Singh & Mr. Sidhartha Kumar
Coordinator

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