



Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Department of Civil Engineering

**Workshop Report on Structural Analysis & Design on
Staad Pro - Basic to Advance**

During from April 29, 2024 to May 03, 2024

Venue: Computer Lab, Ground Floor, Civil Block

Approval Letter of the workshop

Department of Civil Engineering, SKIT, Jaipur

Ref: SKIT/CE/2022-23/1300 Date: 05.06.2023

Sub: Schedule of proposed activities for Session 2023-24

S.No	Types of Event*	Title of Event	Mode of Conduction	Proposed Date	Name of Coordinator	Any Collaboration	Budget Required
1	Expert Talks (06 Nos)	Expert Talks by Renowned Academicians/Industry Experts	Offline	Sep. 2023 to May 2024	Mr Nishant Sachdeva, Dr Abhishek Jain	NA	25000
2	6 day student workshop for V & VII Sem students (Hands on training)	Structural Analysis and Design on ETABS	Offline	September 2023	Ankur Mishra & Dr. Sunita Tolani	NA	6000
3	5 day student workshop (Hands on training for V/VII sem)	Hands-on Primavera P6- Software Project Planning and Scheduling	Offline	September, 2023	Dr. Pooja Jain	NA	6000
4	5 day workshop for III sem students (Hands on training)	MS Excel Basic to Advance	Offline	September 2023	Dr. Pooja Jain	NA	6000
5	Survey camp (III Sem students)	Survey camp at Chandwagi for 3 rd semester students	Field activity as per RTU curriculum	October 2023	Deepak Sharma and Anirudh Mathur	NA	Two buses for 10 days
6	5 day student workshop (Hands on training)	Structural Analysis and Design on Staad Pro Basic to Advance	Offline	October, 2023	Dr. Pooja Jain	NA	6000
7	5 day student workshop for V & VII Sem students (Hands on training)	Hands-on QGIS- Software	Offline	October/November 2023	Ankur Mishra	NA	6000
8	5 day student workshop for VII Sem students (Hands on training)	Mechanical and durability testing of construction products for 4th year students	Offline	October/November 2023	Dr. Abhishek Jain & Dr. Rakesh Choudhary	NA	6000
9	5 day student workshop for VI sem students (Hands on training)	Mix design and testing of self compacting concrete	Offline	January 2024	Dr. Abhishek Jain & Dr. Rakesh Choudhary	NA	6000
10	5 day student workshop (VI Sem.)	Advanced Geotechnical Testing in Laboratory and Field	Offline	February, 2024	Dr. Pooja Gupta and Dr. Bharthi M.	NA	6000
11	International conference	Research Advancements in Sustainable Construction Materials	Online	March 2024	Dr. Kishan Lal Jain, Dr. Ankit Sharma, Mr. Nishant Sachdeva	ICI & IGBC	125000
12	5 day workshop students (Hands on training)	The concept of Vedic Maths	Offline	April 2024	Dr. Pooja Jain	NA	6000
13	Training programs by CoE	Training programs for external/internal students under COE-Transportation Engineering	Offline	August 2023 to May 2024	Anirudh Mathur	NA	25000
						Total	229000

yes, approved
Nishant
28/7/23

Yes permitted to register
28.7.23

Approved
21/8/2023

Pom
HoD-CE 05-06-2023

Brochure of the Event:



SWAMI KESHVANAND INSTITUTE OF
TECHNOLOGY MANAGEMENT AND
GRAMOTHAN JAIPUR

DEPARTMENT OF CIVIL ENGINEERING

Organizing

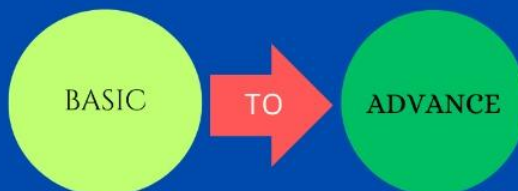
5 Day Student Workshop on

“ STRUCTURAL ANALYSIS AND DESIGN ON STAAD PRO”

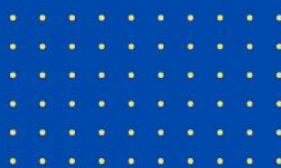
[29 April to 3 May 2024]

Module

- Introduction of STAAD Pro
- Interface of STAAD Pro
- Analyzing of structures



Join Via QR



VENUE

CACHED LAB, GROUND FLOOR,
CIVIL BLOCK

TIME

01:30 PM - 03:30 pM

FACULTY COORDINATOR:-
Dr. POOJA JAIN
(Associate Professor)

STUDENT COORDINATOR:-
MOHIT MEENA (9636615544)
HITANSHU CHHANDWAL (7340661991)

Message with the brochure:

Greetings, Students We are pleased to present a fantastic chance for you to advance your STAAD Pro knowledge. Come participate in an extensive workshop on “Structural Analysis & Design on STAAD Pro- Basic to Advance” with us from April 29 to May 3, 2024.

In this workshop, you will explore the world of STAAD Pro and discover how to use its robust features for Analyzing and Designing of Structures.

After this workshop you will able to :-

- **Understand the Interface, Types of Grid, Create Geometry, Material & Section Properties, Types of Supports, Type of Loads**
- **Analyse the Structure Support Reactions, SFD, BMD-AFD-Stresses-Deflection**
- **Analyse the Beams, Water Tanks**
- **Design G+5 Story Building using RCC.**

Don't miss out on this chance to gain valuable knowledge that can enhance your academic and professional pursuits. Secure your spot today by joining to whatsapp group for the workshop using the following link:

<https://chat.whatsapp.com/DhsCAOq4xe4CZTHgGZ2KB6>

We look forward to seeing you there!

Faculty Coordinator

Dr. Pooja Jain (Associate Professor)

Student Coordinator

Mohit Meena (9636615544)

Hitanshu Chhandwal (7340661991)

Objective of the event with Schedule:

The " Structural Analysis & Design on Staad Pro - Basic to Advance" workshop was conducted from April 29, 2024, to May 03, 2024, at our institution, with the aim of equipping students with essential skills in Microsoft Excel. The workshop was organized by Dr. Pooja Jain, Associate Professor, who served as the convener, and Vikas Vyas, Assistant Professor, who played the role of organizing secretary. The workshop drew participation from 24 enthusiastic students eager to enhance their proficiency in structural analysis & design.

The Structural Analysis & Design workshop focusing on Staad Pro, from basic to advanced levels, was conducted with the aim of providing participants with comprehensive knowledge and practical skills in utilizing the software for structural engineering tasks. The workshop

covered various aspects, from basic modelling techniques to advanced analysis and design methodologies.

Workshop Highlights:

Day 1: 29 April, 2024 (Monday)

- **Familiar with Staad Pro (Understand the Interface, Types of Grids, Create Geometry, Material & Section Properties, Types of Supports, Type of Loads)**
- **Analyse the Beams**
- **Hands on Practice**

Day 2: 30 April, 2024 (Tuesday)

- **Analyse the Frames Support Reactions, SFD, BMD-AFD-Stresses-Deflection**
- **Hands on Practice**

Day 3: 01 May, 2024 (Wednesday)

- **Analyse the Water Tanks**
- **Hands on Practice**

Day 4: 02 May, 2024 (Thursday)

- **Design G+7 Story Building using RCC.**
- **Hands on Practice**

Day 5: 03 November, 2024 (Friday)

- **Hands on Practice session and Problem-Solving Class**

Valedictory Session (2:30 PM Onwards)

The Structural Analysis & Design workshop on Staad Pro provided participants with a comprehensive understanding of the software's capabilities, from basic modeling to advanced analysis and design. Participants gained practical skills through hands-on exercises and were equipped with the knowledge to apply Staad Pro effectively in their professional practice. The workshop served as a valuable platform for enhancing the expertise of structural engineers and expanding their proficiency in utilizing software tools for structural engineering tasks.

List of registered participants:

Sr. No.	Name	RTU Roll No	Section
1	Aditya Poonia	21ESKCE003	A
2	Bhavnish Kanwat	21ESKCE011	A
3	Darshit Mathur	21ESKCE014	A
4	Dinesh Sharma	21ESKCE019	A
5	Fariyad Khan	21ESKCE023	A
6	Himesh Kumawat	21ESKCE031	A
7	Hitanshu Chhandwal	21ESKCE032	A
8	Jaswant Jangid	21ESKCE035	A
9	Kamlesh Singh Gurjar	21ESKCE038	A
10	Khan Mosim Wahid	21ESKCE043	A
11	Lavish Ahuja	21ESKCE046	A
12	Meet Khandelwal	21ESKCE051	A
13	Mohit Meena	21ESKCE053	A
14	Namasya Choudhary	21ESKCE055	A
15	Nandini Singhal	21ESKCE056	A
16	Nikhil	21ESKCE059	B
17	Pawan	21ESKCE063	B
18	Punnet	21ESKCE070	B
19	Reva Verma	21ESKCE078	B
20	Saarthak Chopra	21ESKCE084	B
21	Uday Singh Sisodia	21ESKCE097	B
22	Urvashi Gautam	21ESKCE098	B
23	Vipul Raman	21ESKCE102	B
24	Anuj Bhatnagar	21ESKCE201	B

Participants List only 6th semester students of SKIT CED



Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

DEPARTMENT OF CIVIL ENGINEERING

WORKSHOP ON "Structural Analysis & Design on Staad Pro - Basic to Advance" (29 April – 03 May, 2024)

ATTENDANCE SHEET & PARTICIPANTS LIST APPLICABLE FOR 6th SEMESTER STUDENTS

Sr. No.	Name	Roll No.	Section	29 April, 2024	30 April, 2024	1 May, 2024	2 May, 2024	3 May, 2024
1	Aditya Poonia	21ESKCE003	A	Aditya	Aditya	Aditya	Aditya	Aditya
2	Bhavish Kanwat	21ESKCE011	A	Bhavish	Bhavish	Bhavish	Bhavish	Bhavish
3	Darshit Mathur	21ESKCE014	A	Darshit	Darshit	Darshit	Darshit	Darshit
4	Dinesh Sharma	21ESKCE019	A	Dinesh	Dinesh	Dinesh	Dinesh	Dinesh
5	Fariyad Khan	21ESKCE023	A					
6	Himesh Kumawat	21ESKCE031	A					
7	Hitanshu Chhandwal	21ESKCE032	A	Hitanshu	Hitanshu	Hitanshu	Hitanshu	Hitanshu
8	Jaswant Jangid	21ESKCE035	A	Jaswant	Jaswant	Jaswant	Jaswant	Jaswant
9	Kamlesh Singh Gurjar	21ESKCE038	A					
10	Khan Mosim Wahid	21ESKCE043	A					
11	Lavish Ahuja	21ESKCE046	A	Lavish	Lavish	Lavish	Lavish	Lavish
12	Meet Khandelwal	21ESKCE051	A	Meet	Meet	Meet	Meet	Meet
13	Mohit Meena	21ESKCE053	A	Mohit	Mohit	Mohit	Mohit	Mohit
14	Namasya Choudhary	21ESKCE055	A					
15	Nandini Singhal	21ESKCE056	A	Nandini	Nandini	Nandini	Nandini	Nandini
16	Nikhil	21ESKCE059	B					
17	Pawan	21ESKCE063	B					

18	Punnet	21ESKCE070	B	Punnet	Punnet	Punnet	Punnet
19	Reva Verma	21ESKCE078	B	Punnet	Punnet	Punnet	Punnet
20	Saarthak Chopra	21ESKCE084	B	Punnet	Punnet	Punnet	Punnet
21	Uday Singh Sisodia	21ESKCE097	B				
22	Urvashi Gautam	21ESKCE098	B				
23	Vipul Raman	21ESKCE102	B	Punnet	Punnet	Punnet	Punnet
24	Anuj Bhatnagar	21ESKCE201	B				

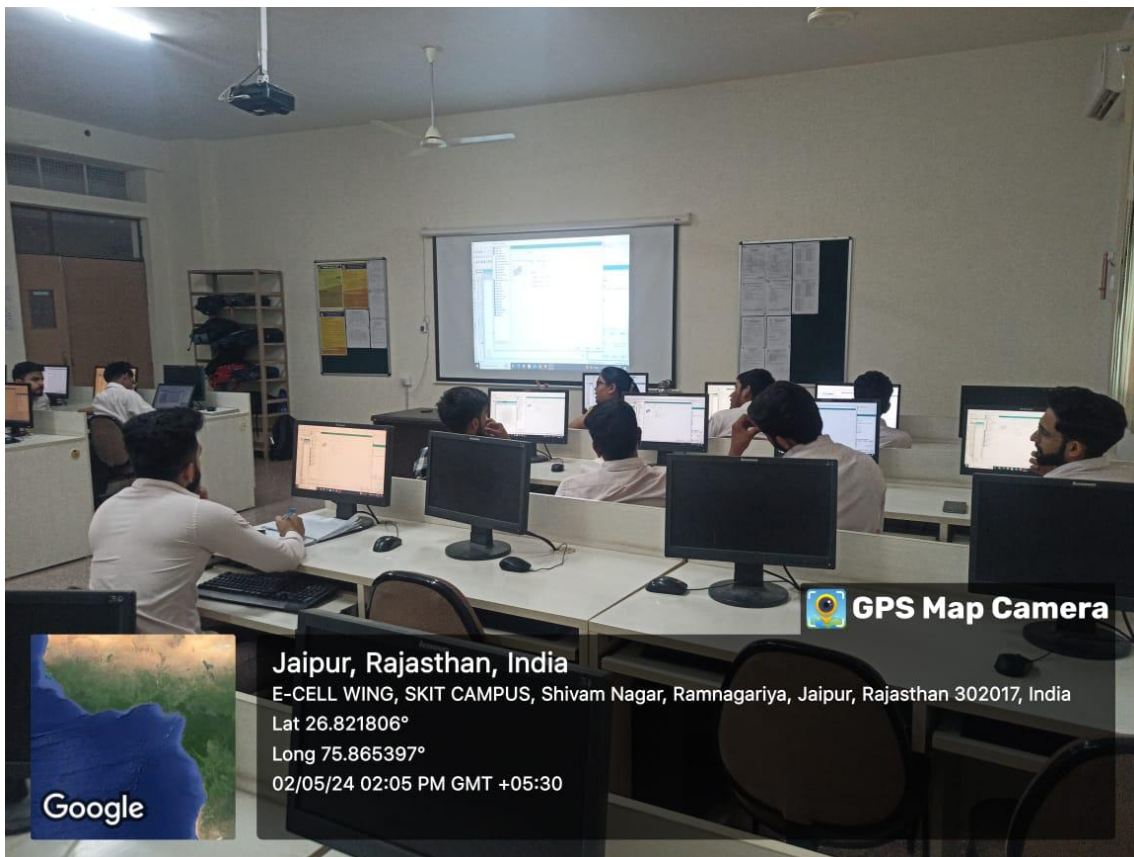
Faculty Co-ordinator

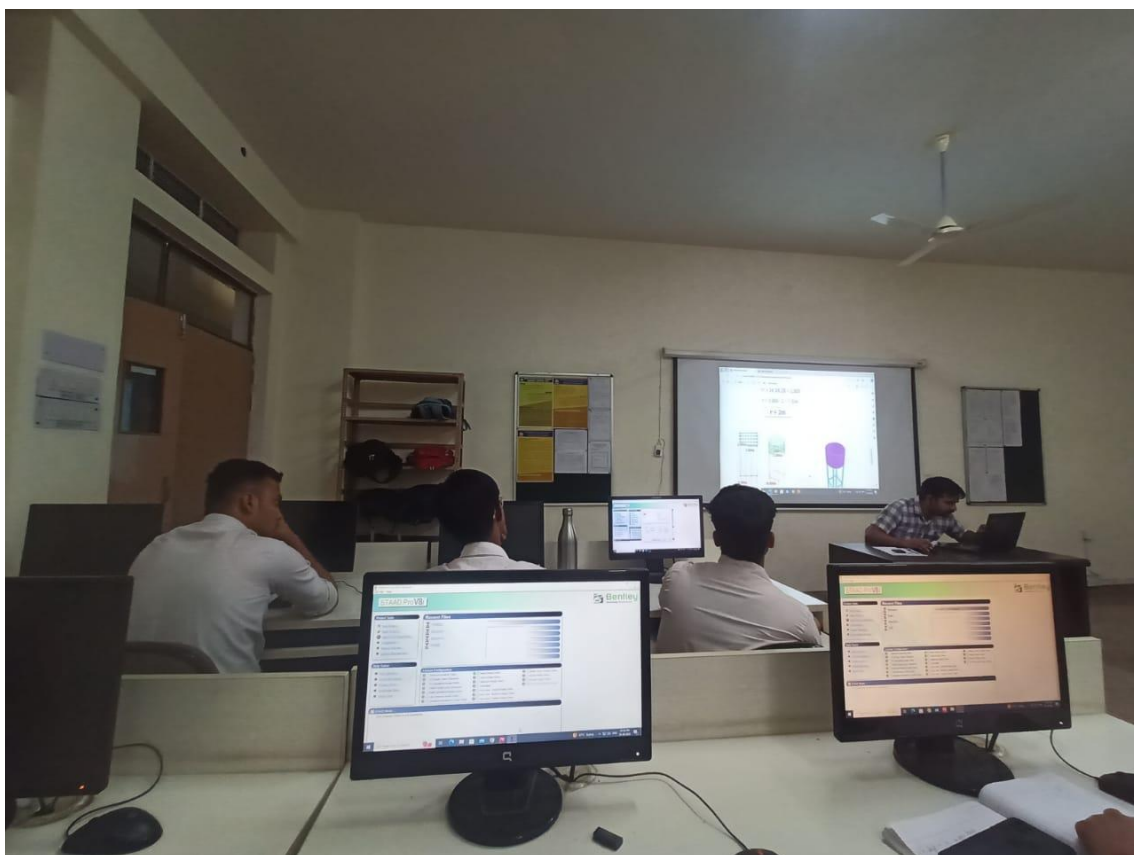
Name & Signature

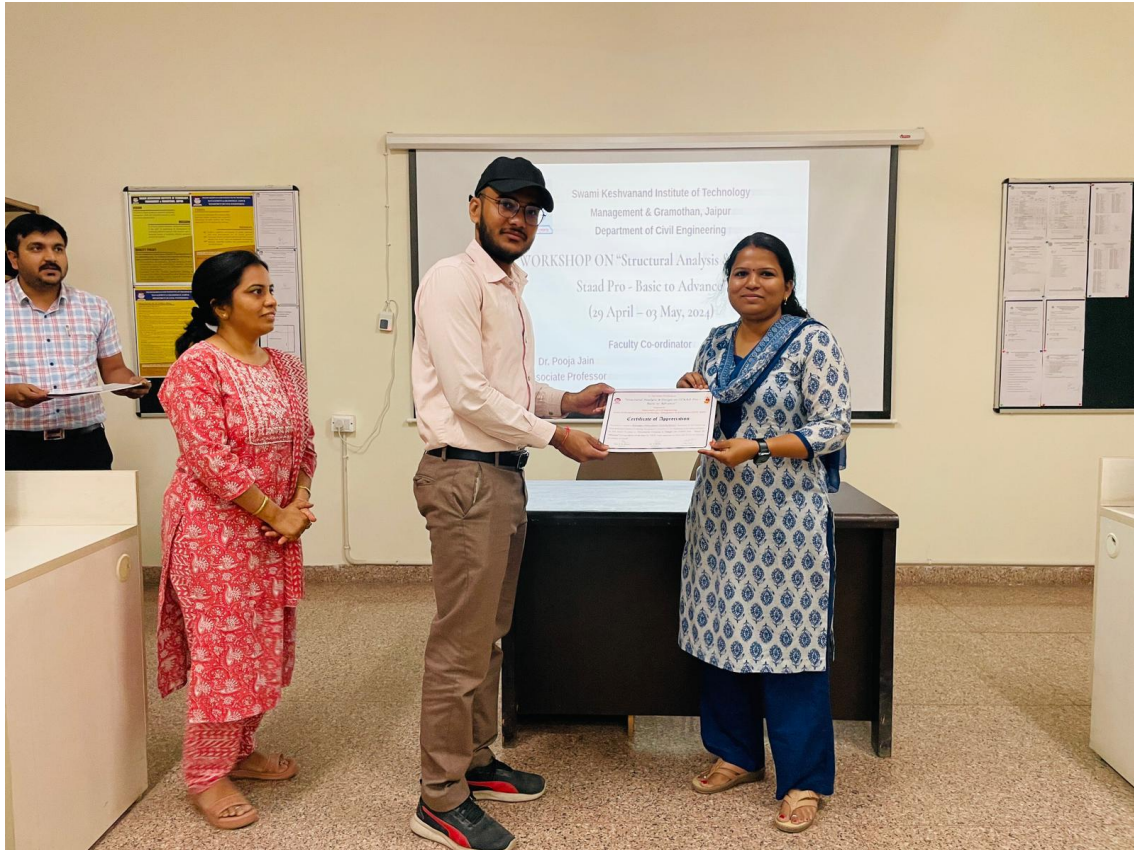

Dr. Pooja Jain


Vikas Vyas

An insight of the event









Certificate of the students

Fourteen participants successfully attended the workshop and received certificates, with two students obtaining workshop coordinator certificates for their exceptional contribution. The sample participation certificate as attendees and student coordinator certificate for the workshop is as follows:





5 - Day Student Workshop on

"Structural Analysis & Design on STAAD Pro - Basic to Advance"



Organised by

Department of Civil Engineering

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur

Certificate of Participation

This is to certify that Mohit Meena (21ESKCE053) has successfully participated in 5 - Day Student Workshop on "Structural Analysis & Design on STAAD Pro - Basic to Advance" held from April 29 to May 03, 2024 at Swami Keshvanand Institute of Technology, Management and Gramothan (SKIT), Jaipur.

Prof. D. K. Sharma
HoD, CE

Dr. Pooja Jain
Coordinator

Vikas Vyas
Organising Secretary

Feedback from the student

Participants appreciated the practical approach of the workshop and found the hands-on exercises particularly beneficial. They expressed satisfaction with the depth of coverage on both basic and advanced topics and commended the expertise of the presenters.

Feedback from the students about the workshop												
Username	NAME	RTU Roll No.	On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how would you rate your overall satisfaction with the Workshop ?	Did the session content meet your expectations?	Were the topics covered relevant and beneficial to your needs?	How would you rate the knowledge and effectiveness of the instructors?	Were the instructors able to clarify your doubts and provide helpful insights?	Did the use of real-life examples and hands-on exercises enhance your learning experience?	Did you find the workshop interactive and engaging?	Do you think the duration was appropriate for covering the topics effectively?	Are you satisfied with the overall organization of the lecture, including the schedule and timing ?	Please share any additional comments, suggestions, or feedback you have regarding the workshop.
b210413@skit.ac.in	Saarthak Chopra	21ESKCE084	5	5	5	5	4	5	5	5	5	Need Many more advance workshop just like staad pro ...
b210941@skit.ac.in	Bhavnish Kanwat	21ESKCE011	5	5	5	5	5	5	5	5	5	Good
b210312@skit.ac.in	Puneet Dadhich	21ESKCE070	5	5	5	5	5	5	5	5	5	Good initiative by faculties.
b210724@skit.ac.in	Mohit Meena	21ESKCE053	5	5	5	5	5	5	5	5	5	Timing of workshop should be earlier.
b210349@skit.ac.in	Nandini Singhal	21ESKCE056	4	4	4	5	5	4	4	4	4	No
b210671@skit.ac.in	Reva Verma	21ESKCE078	5	5	4	5	5	5	5	4	4	The duration of the workshop was less.
b210946@skit.ac.in	Hitanshu Chhandwal	21ESKCE032	5	5	5	4	4	5	5	5	5	No additional

एसकेआईटी में कार्यशाला का आयोजन

जयपुर(सीमा सन्देश)। एसकेआईटी (स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी, मैनेजमेंट एंड ग्रामोथान), जगतपुरा में सोमवार को पांच दिवसीय 'स्ट्रक्चरल एनालिसिस एंड डिजाइन ऑन स्टैड प्रो- बुनियादी से उन्नत स्तर तक' कार्यशाला का उद्घाटन किया गया। सिविल इंजीनियरिंग विभाग द्वारा आयोजित, कार्यशाला का उद्देश्य छात्रों को स्टैड प्रो से परिचित कराना है। कार्यशाला प्रमुख डॉ. पूजा जैन (एसोसिएट प्रोफेसर और उप प्रमुख, सिविल विभाग) और विकास व्यास (सहायक



प्रोफेसर, सिविल विभाग) ने उद्घाटन के दौरान आधुनिक संरचनात्मक इंजीनियरिंग में स्टैड प्रो के महत्व पर जोर दिया। कार्यशाला में प्रतिभागी स्टैड प्रो का उपयोग करके मॉडलिंग, विश्लेषण और

डिजाइन को कवर करने वाले व्यावहारिक सत्रों में भाग लेंगे। प्रो. बीएल शर्मा ने छात्रों को प्रोत्साहित किया एवं डिजाइन इंजीनियरिंग के अनुप्रयोगों की उपयोगिता के बारे में बताया।



एसकेआईटी में स्ट्रक्चरल एनालिसिस एंड डिजाइन ऑन स्टैड प्रो- बुनियादी से उन्नत स्तर तक कार्यशाला का उद्घाटन

P3 Police Public Politics

जयपुर। स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी, मैनेजमेंट एंड ग्रामोथान (एसकेआईटी), जगतपुरा में 29 अप्रैल को पांच दिवसीय 'स्ट्रक्चरल एनालिसिस एंड डिजाइन ऑन स्टैड प्रो- बुनियादी से उन्नत स्तर तक' कार्यशाला का उद्घाटन किया। सिविल इंजीनियरिंग विभाग द्वारा

आयोजित, कार्यशाला का उद्देश्य छात्रों को स्टैड प्रो से परिचित कराना है। कार्यशाला प्रमुख डॉ. पूजा जैन (एसोसिएट प्रोफेसर और उप प्रमुख, सिविल विभाग) और श्री विकास व्यास (सहायक प्रोफेसर, सिविल विभाग) ने उद्घाटन के दौरान आधुनिक संरचनात्मक इंजीनियरिंग में स्टैड प्रो के महत्व पर जोर दिया। कार्यशाला के दौरान

प्रतिभागी स्टैड प्रो का उपयोग करके मॉडलिंग, विश्लेषण और डिजाइन को कवर करने वाले व्यावहारिक सत्रों में भाग लेंगे। प्रो. बी.एल. शर्मा सर ने उद्घाटन के दौरान छात्रों को प्रोत्साहित किया एवम छात्रों को डिजाइन इंजीनियरिंग के अनुप्रयोगों की उपयोगिता के बारे में बताया।

Outcome of the workshop

Day 1: 29 April, 2024 (Monday)

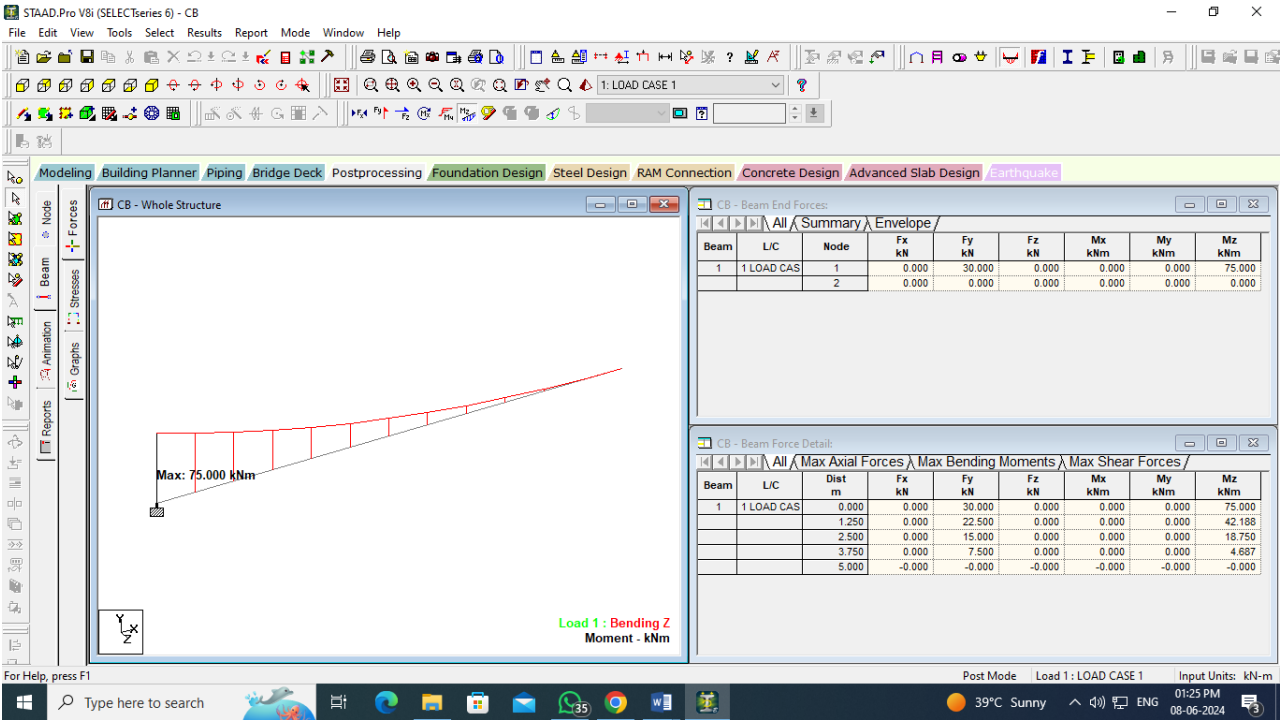


Fig 1: Cantilever beam with bending moment diagram

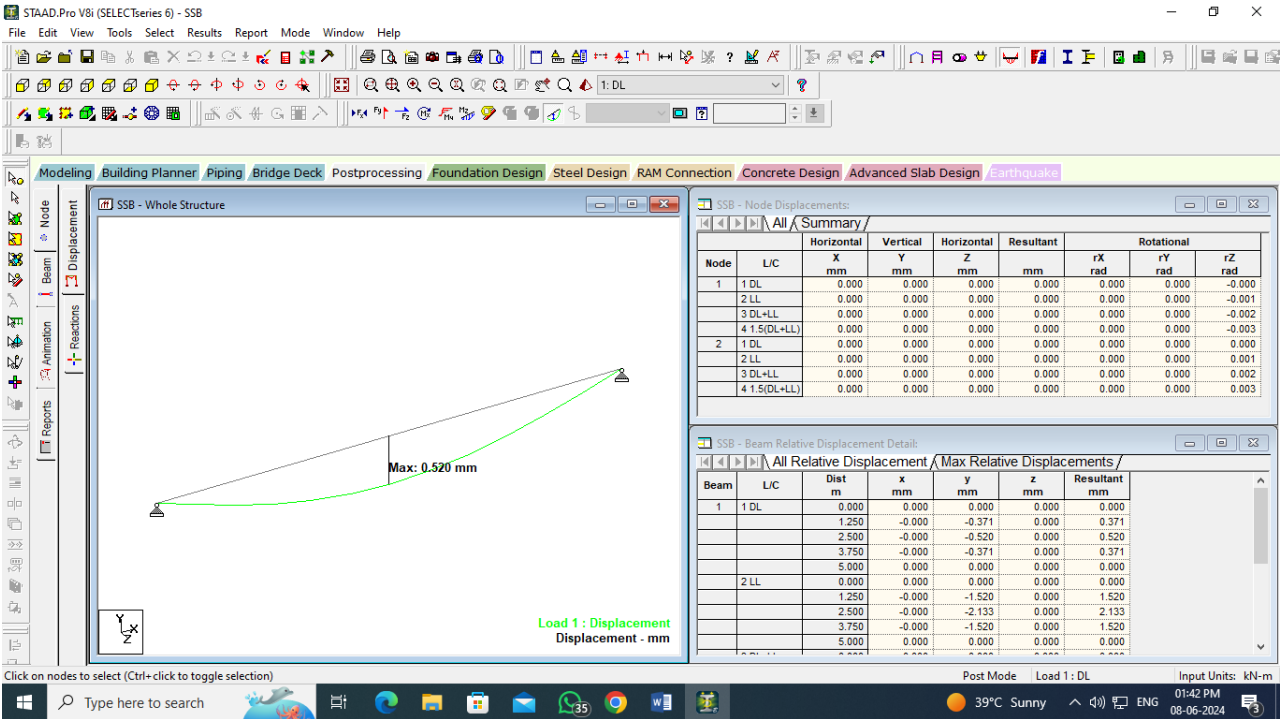


Fig 2: Simply supported beam with maximum deflection

Day 2: 30 April, 2024 (Tuesday)

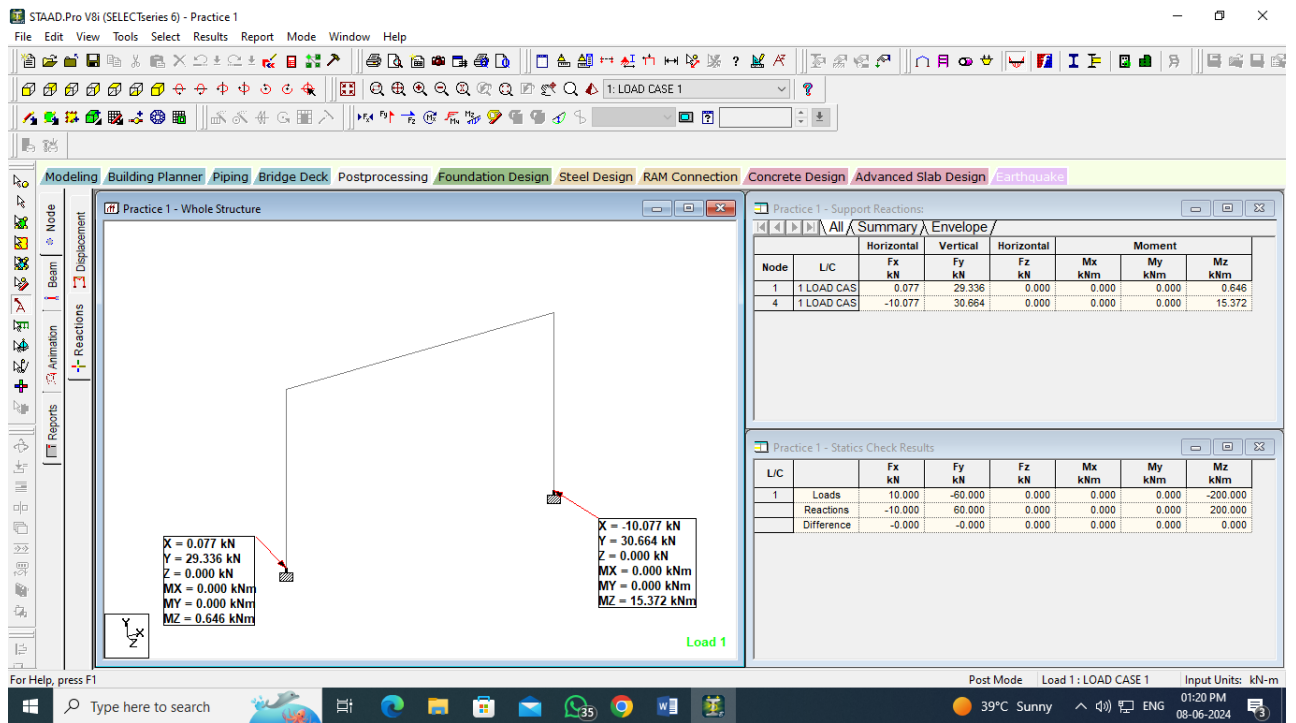


Fig 3: Simple frame with reactions

Day 3: 01 May, 2024 (Wednesday)

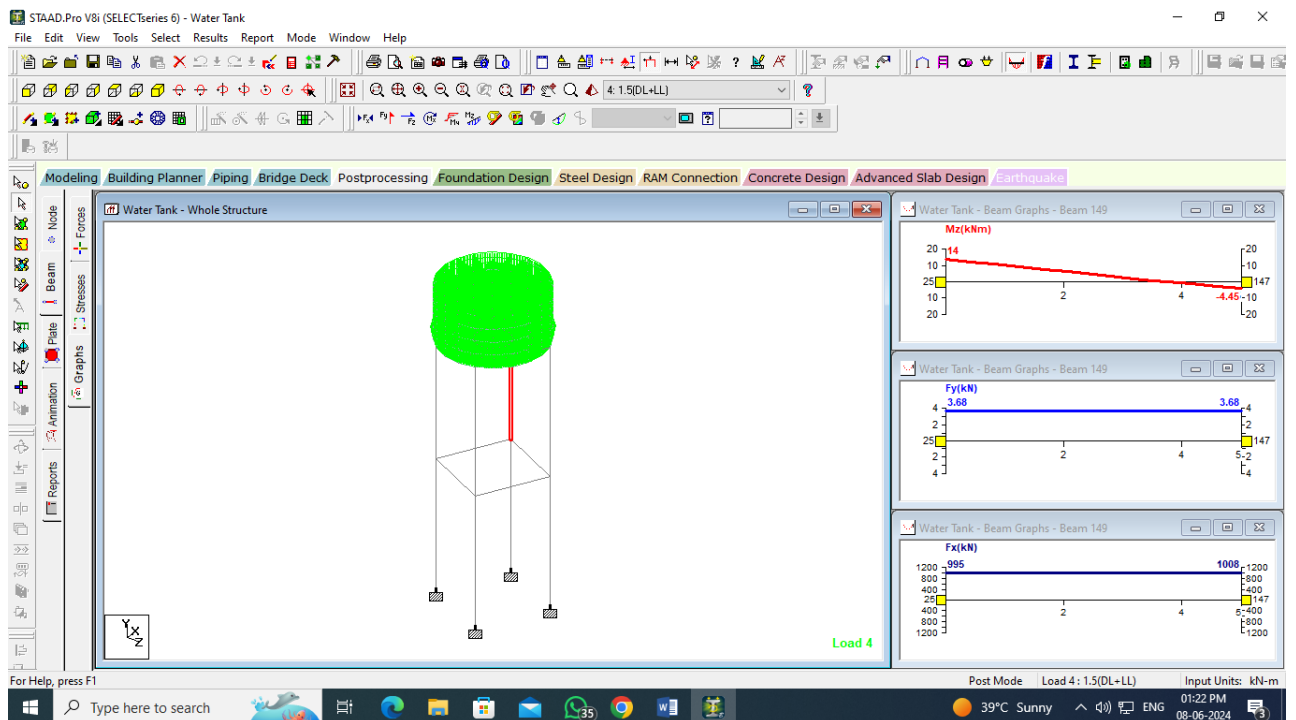


Fig 4: Water tank modelling and design

Day 4: 02 May, 2024 (Thursday)

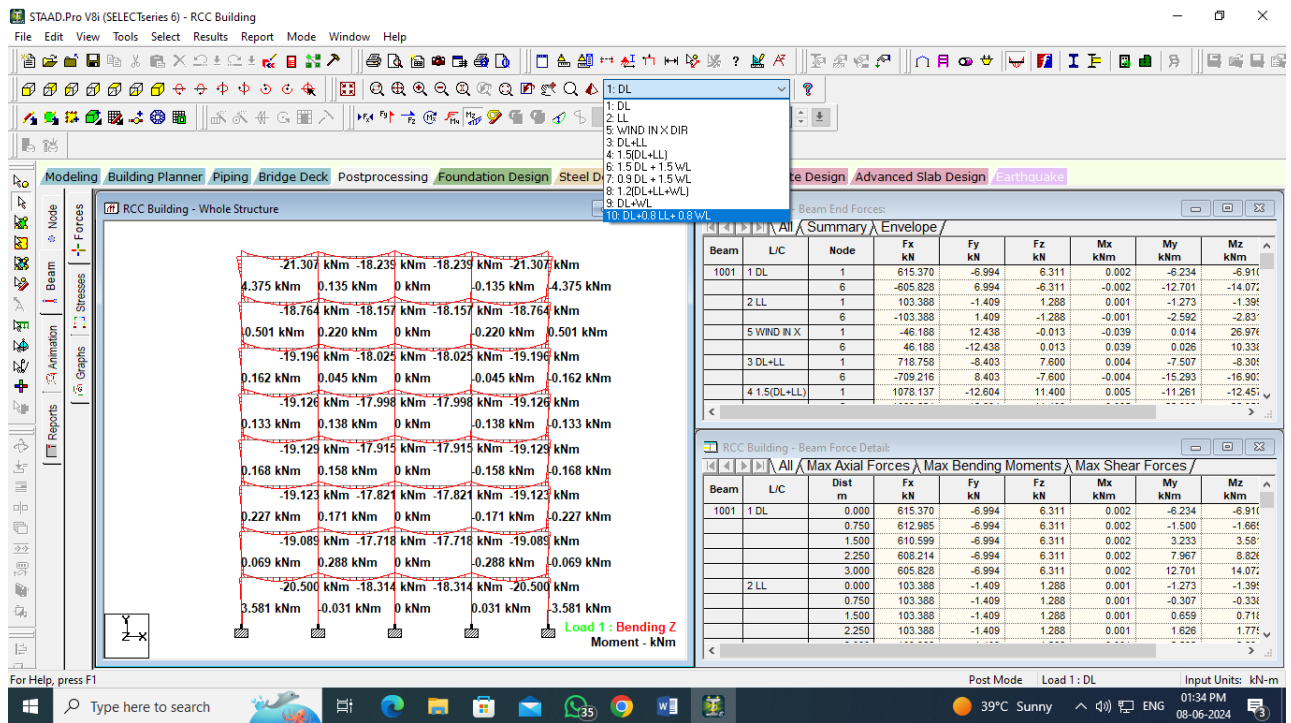


Fig 5: Design G+7 Story Building using RCC

Day 5: 03 November, 2024 (Friday)

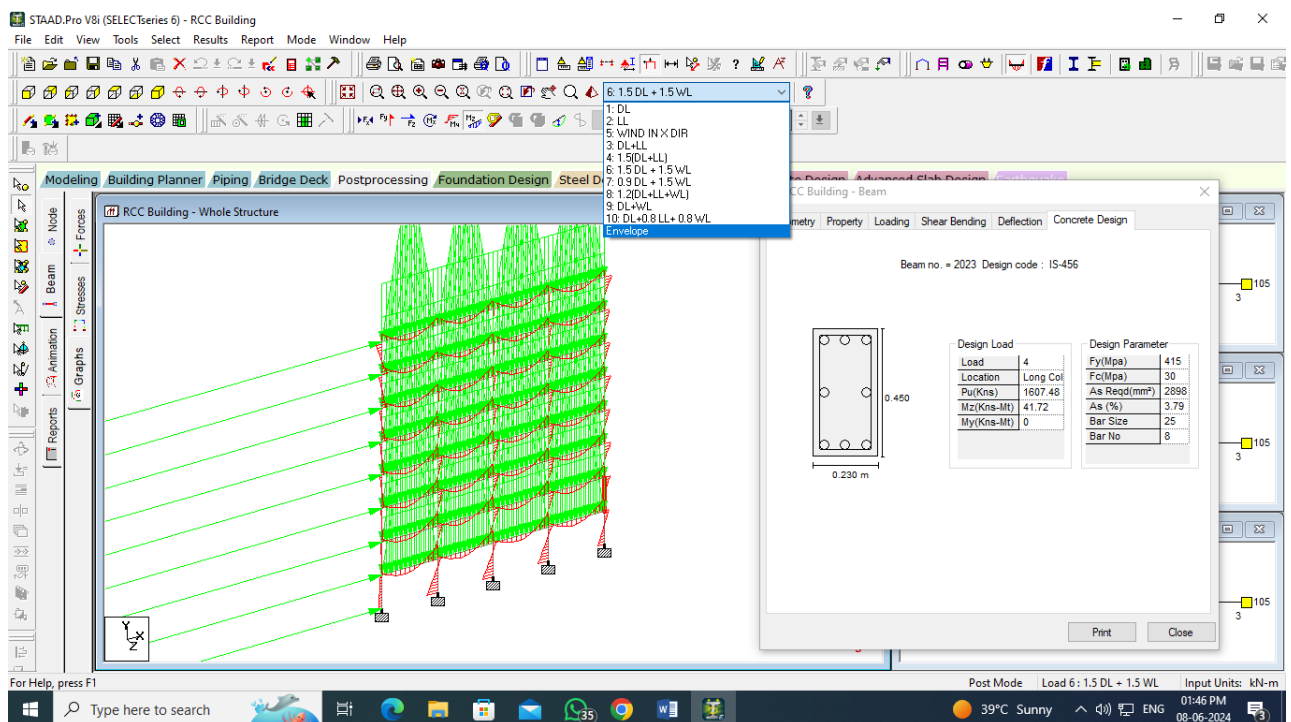


Fig 6: Design G+7 Story Building using RCC

Engaging in practical exercises enhances their proficiency, equipping them with valuable professional skills for real-world applications.

Students Coordinator:

1. Mohit Meena (9636615544)
2. Hitanshu Chhandwal (7340661991)

Faculty Coordinator:

1. Dr. Pooja Jain (9694909018) (Convener)
2. Vikas Vyas (8788359115) (Organising Secretary)

Relevance to POs and PSOs

S.No.	Name of Activity	Resource Person	Related POs and PSOs
1	Workshop on Structural Analysis & Design on Staad Pro - Basic to Advance	Dr. Pooja Jain Vikas Vyas	POs: 3.1.1, 3.1.2, 3.1.4, 3.1.5, 3.1.6, 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 5.1.1, 5.1.2, 5.2.1, 5.2.2, 5.3.1, 5.3.2, 12.1.1, 12.1.2, 12.2.1, 12.2.2, 12.3.2 PSOs: 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.2, 2.1.3