



**SRI VENKATESWARA COLLEGE OF ENGINEERING**  
**DEPARTMENT OF CIVIL ENGINEERING**



**Report of the Workshop on**  
**“Advanced Structural Analysis using STAAD.Pro”**



**27.02.2024 & 28.02.2024**

**Coordinator**

**Mr. A. Vijay Vignesh**  
(AP/Civil Engg.)

**Convenor**

**Dr. R. Kumutha**  
HoD/Civil Engg.



# SRI VENKATESWARA COLLEGE OF ENGINEERING

(An Autonomous Institution affiliated to Anna University, Chennai)

Pennalur, Sriperumbudur Tk – 602 117



## DEPARTMENT OF CIVIL ENGINEERING



### Report of the Workshop on “Advanced Structural Analysis using STAAD.Pro”

Dates : 27.02.2024 & 28.02.2024  
Timings : 08.30 A.M – 03.30 P.M  
Mode : Offline  
Venue : CADD Lab, SVCE

#### Speaker

**Mr. R. Balamourougane**

Structural Manager

STAAD Consultant

TechApps Consulting, Chennai

#### Convenor & Organizing Secretary

Dr. R. Kumutha, Professor & Head/Civil Engineering

#### Coordinator

Mr. A. Vijay Vignesh, Assistant Professor/Civil Engineering

#### Target Audience: IV Year Students & Faculty Members

Number of Participants benefited: 20

UG Students : 19

Lab Instructors : 1

Total No of Internal Participants – 20

Students – 19, Lab Instructors - 1

# BROCHURE



**S**  **CE** | Sri Venkateswara  
College of  
Engineering



(Autonomous - Affiliated to Anna University)  
Pennalur, Sriperumbudur Tk., - 602117, Tamil Nadu

**Department of Civil Engineering**

*in association with*

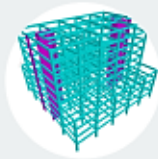
**TechApps Consulting, Chennai**

*jointly invite you for a*

**Workshop**

*on*

**Advanced Structural Analysis using STAAD.Pro**



**Mr. R. Balamourougane**  
Structural Manager  
STAAD Consultant  
TechApps Consulting, Chennai



**Scheduled on**  
27th & 28th February 2024

**Venue: CADD Lab (14-102B)**

**Target Audience: III Year Students (2021-25 batch)**

**Faculty Coordinator**  
Mr. A. Vijay Vignesh, AP/Civil

**Convenor & Organizing Secretary**  
Dr.R.Kumutha  
Head of the Department  
Civil Engineering



Vijay Vignesh CVE &lt;avijayvignesh@svce.ac.in&gt;

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## Workshop on Advanced Structural Analysis using STAAD.Pro - 27th & 28th February 2024

2 messages

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**HOD Civil SVCE** <hodce@svce.ac.in>

Mon, Feb 26, 2024 at 10:12 AM

To: 2021 CE Students Group &lt;2021cestudents@svce.ac.in&gt;

Cc: Civil Engineering-Teaching Staff &lt;ce@svce.ac.in&gt;, Civil Engineering-Supporting Staff &lt;ces@svce.ac.in&gt;

Dear students

This is for your information and all the students must attend as this workshop is being organised as a part of MoU with Techapps

----- Forwarded message -----

From: **Vijay Vignesh CVE** <avijayvignesh@svce.ac.in>

Date: Sat, Feb 24, 2024 at 6:00 PM

Subject: Brochure - Workshop on Advanced Structural Analysis using STAAD.Pro - 27th &amp; 28th February 2024

To: HOD Civil SVCE &lt;hodce@svce.ac.in&gt;

Madam,

PI find the attached brochure for the Workshop on Advanced Structural Analysis using STAAD.Pro which is scheduled from 27.02.2024 to 28.02.2024.

Thank you.

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Thanks and Regards

**Dr.R.Kumutha****Professor and Head**

Department of Civil Engineering

Sri Venkateswara College of Engineering

Sriperumbudur - 602117

TN, India

Ph: 9894125626

[Web of Science Profile](#)[Scopus Author Profile](#)[Google Scholar Profile](#)**Workshop on Advanced Structural Analysis using STAAD.Pro - 27th & 28th February 2024.pdf**

2186K

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**Vijay Vignesh CVE** <avijayvignesh@svce.ac.in>

Mon, Feb 26, 2024 at 6:16 PM

To: Rajesh Kumar &lt;sales@techappsconsulting.in&gt;

Dear Sir,

PI find the attached brochure for the Workshop on "Advanced Structural Analysis using STAAD.Pro" which is scheduled from 27.02.2024 to 28.02.2024.

Venue - CADD lab, SVCE

Thank you.

**Workshop on Advanced Structural Analysis using STAAD.Pro - 27th & 28th February 2024.pdf**

2186K

## **PROFILE OF THE SPEAKER**

Mr.R.Balamourougane who is currently designated as the Structural Manager in TechApps Consulting, Chennai. He is a strong consulting professional graduated from Pondicherry Engineering College. He is experienced Consultant with a demonstrated history of working in the civil engineering industry. He is also a Certified trainer in Bentley systems. He is skilled in Structural Engineering, Bridge, Structural Analysis, Retaining Walls, and Steel Design.

## **BRIEF REPORT OF THE WORKSHOP**

Mr. A. Vijay Vignesh, Assistant Professor, Department of Civil Engineering, Sri Venkateswara College of Engineering has delivered the welcome address and introduced the speaker Mr. R. Balamourougane, to all the participants.

The speaker welcomed the gathering and gave a brief overview on STAAD Pro software and its importance in construction projects. The following steps were covered during the hands-on session on Advanced concrete design of the structure using STAAD Pro software,

- a. Structural Modeling - Adding Beams using Tools, Creating Beams (Colinear, Along Axes), Creating Plates, Creating Surfaces, Creating Solid Elements, Creating Structure. Participants created a sample structure with predefined dimensions.
- b. Material Constants and Section Properties - Material Constants, Creating and Editing Material Properties, Assigning Materials to the Structure
- c. Member Specifications and Supports - Node Specification, Member Specifications, Plate Specifications, Supports (Pinned/fixed)
- d. Loads - Types of Loads: Self weight, Nodal, Member, Area, Floor, Plate, Surface and Solid; Load Generation, Load Combinations.
- e. Comply with seismic requirements & Wind Loads - Design and detail seismic force-resisting systems, generating seismic loads according to the relevant IS code. Participants considered the ductility requirements of the selected design code in element proportioning and detailing.
- f. Performing Analysis - Pre-Analysis, Problem Statistics, Joint Coordinates, Member Information, Material Properties, Support Information, Element & Solid Information; Performing Analysis
- g. Post Processing & Report Creation - Output File, Post Processing Mode.
- h. Concrete drawings and schedules - Generate comprehensive reinforcing drawings including automated rebar labels, dimensions, and notes, as well as rebar placing drawings, including

sections, plans, and details from the 3D model. This part is carried out in STAAD RCDC software. The footing drawing and specifications were generated using the same software.

- i. Quantity Takeoffs - Calculating material takeoffs and cost estimation.

The speaker concluded the session and discussed on the queries/doubts raised by the participants.

The session was interactive, and the questions raised by the students were answered by the speaker. The session ended with a vote of thanks delivered by Mr. A. Vijay Vignesh, Assistant Professor, Department of Civil Engineering, Sri Venkateswara College of Engineering. The participants also had appreciated the workshop.

## **Program Objectives**

The objectives of the workshop are:

- To provide hands on training on advanced structural analysis of a building as per Indian Standards using STAAD.Pro software for the students.

The following Program Outcomes (POs) and Program Specific Outcomes (PSOs) are addressed for the Workshop on “**Advanced Structural Analysis using STAAD.Pro**”,

Particulars	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Advanced Structural Analysis using STAAD.Pro	✓	✓	✓	✓	✓			✓				✓	✓	✓

**Feedback Link:** <https://forms.gle/z72WPjSTFkJovraF8>

## SNAPSHOTS OF THE WORKSHOP





### LIST OF PARTICIPANTS

S.No.	Register No.	Name of the Student	Year
1	2127210401001	AADESHWAR S	III
2	2127210401002	ABINAYA S	III
3	2127210401003	BALAJI K	III
4	2127210401004	HARINI A	III
5	2127210401005	HARISHKANNEN R	III
6	2127210401006	KALICHARAN A S	III
7	2127210401007	KAVIYA R	III
8	2127210401008	KISHOR M	III
9	2127210401009	LOMINA R	III
10	2127210401010	NITHILA M	III
11	2127210401011	PRIYADARSHINI R	III
12	2127210401012	RAGHAVENDRA B	III
13	2127210401013	RASHIK AHMED R	III
14	2127210401014	VELAN S	III
15	2127210401301	BALAJI M	III
16	2127210401302	GOPINATH K	III
17	2127210401303	KAILASH SUNDAR M	III
18	2127210401304	KUMARAN S	III
19	2127210401305	VISHVANANTHAN S L	III
20	-	BHUVANESWARI	Lab Instructor

# Feedback link - Workshop on "Advanced Structural Analysis using STAAD.Pro" - Civil Department - SVCE

Feedback Form  
Department of Civil Engineering

**Workshop on "Advanced Structural Analysis using STAAD.Pro"**

Date: **27.02.2024 & 28.02.2024**

Speaker Name:

**Mr. R. Balamourougane**

Structural Manager

STAAD Consultant

TechApps Consulting, Chennai

Kindly provide your valuable feedback.

Email ID \*

2021ce0364@svce.ac.in

Name of the Participant \*

KAVIYA R

Name of the Department \*

CIVIL

Category \*

- Third year student
- Final year student
- Faculty
- Lab Technician

Mobile number (Whatsapp)

.....

Please rate your satisfaction with the content of the Lecture delivered by the speaker by indicating your level of agreement or disagreement with each of the following statements. \*

	Strongly agree	Agree	Neutral	Disagree
The session delivered the information I expected to receive.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The subject matter was presented effectively.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The pace and duration of the workshop was satisfactory.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The resource person is knowledgeable.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The resource person presented the information in a clear and logical manner	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sufficient time was given for interaction	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The workshop was well organized	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As a result of this workshop, I gained new knowledge	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are you interested in attending such programs organized in future by the Department of Civil Engineering of SVCE \*

Yes

No

Additional Comments/Feedback \*

Very Informative session. Learnt about the STAAD Pro software.

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This form was created inside of Sri Venkateswara College of Engineering.

Google Forms

## PARTICIPATION CERTIFICATE



**Bentley®**

**Certificate of Accomplishment**

THIS CERTIFICATE IS PRESENTED TO

***HARINI A***

upon successful completion of

***Structural Analysis & Design in STAAD.Pro - Intermediate Course CONNECT Edition | EN | EN***

Product: STAAD.Pro Version: CONNECT Edition

Course Date: February 27, 2024 - February 28, 2024 Learning Units: 12

Training Partner: Techapps Consulting



**Amit Trehan**  
Director, User Learning  
Bentley Systems Inc.

Certificate ID: 701547477

**Bentley**

Participants can download their certificates from the Bentley website.

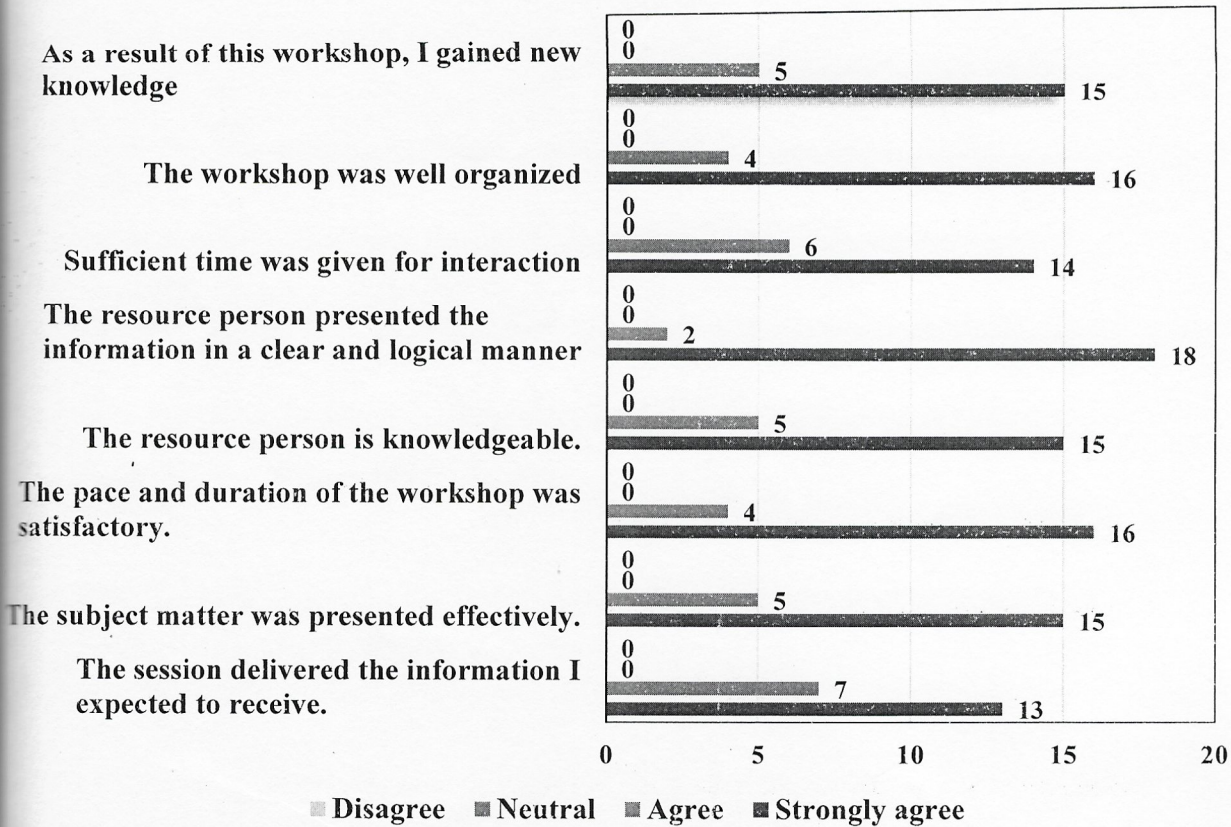
**Link:** <https://learn.bentley.com/app/Public>

## SUMMARY OF FEEDBACK

**Total Number of respondents: 20**

<b>Feedback</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>
The session delivered the information I expected to receive.	13	7	0	0
The subject matter was presented effectively.	15	5	0	0
The pace and duration of the workshop was satisfactory.	16	4	0	0
The resource person is knowledgeable.	15	5	0	0
The resource person presented the information in a clear and logical manner	18	2	0	0
Sufficient time was given for interaction	14	6	0	0
The workshop was well organized	16	4	0	0
As a result of this workshop, I gained new knowledge	15	5	0	0

### SUMMARY OF FEEDBACK



*Signature of Mr. A. Vijay Vignesh*

Prepared by

Mr. A. Vijay Vignesh (AP/Civil Engg.)  
Coordinator

*Signature of Dr. R. Kumutha*

Approved by

Dr. R. Kumutha (HoD/Civil Engg.)  
Convener & Organizing secretary