

# SRI VENKATESWARA COLLEGE OF ENGINEERING DEPARTMENT OF CIVIL ENGINEERING



Report of the Faculty Development Program (FDP) on "Structural Design and Analysis using STAAD.Pro"





10.07.2023

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 FDP on "Structural Design and Analysis using STAAD.Pro"

Dates: 10.07.2023

Time : 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: Faculty members & Lab Instructor

Number of Participants benefited : 9
Faculty Members : 8
Lab Instructor : 1

Total No of Internal Participants – 9

Students – 0, Faculty Members – 8, Lab Instructor - 1

#### **BROCHURE**







(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

**Faculty Development Program** 

or

**Structural Design and Analysis using STAAD.Pro** 







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



Scheduled on 10th July 2023

Venue: CADD Lab (14-102B)

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

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



# FDP on "Structural Design and Analysis on STAAD.Pro" - SVCE - reg

1 message

Vijay Vignesh CVE <avijayvignesh@svce.ac.in>
To: Rajesh Kumar <sales@techappsconsulting.in>
Cc: HOD Civil SVCE <hodce@svce.ac.in>

Fri, Jul 7, 2023 at 3:10 PM

Sir,

PI find the attached brochure for the Faculty Development Program (FDP) on **"Structural Design and Analysis on STAAD.Pro"** which is scheduled on July 10th (Monday).

Venue: CADD Lab, SVCE

--- Thanks and Regards ---Vijay Vignesh Assistant Professor - Civil Department, Sri Venkateswara College of Engineering, Sriperumbudur

FDP on Structural Design & Analysis using STAAD.Pro.pdf 4582K

#### 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 topics were covered during the hands-on session on Analysis and design of Multistorey Building using STAAD Pro software,

- a. Introduction to STAAD.Pro
- About Bentley STAAD.Pro
- Starting STAAD.Pro
- Graphical User Interface
- Starting a New Project Working with User Interface: Menu Bars, Tool Bars, Tabs, Snap Node / Beam Window, Data Area, Main Window
- Opening and Existing Project
- Saving a Project
- Configuring Units
- Keyboard Shortcuts
- Importing Model in STAAD.Pro
- Coordinate Systems
- a. Structural Modeling Adding Beams using Tools, Creating Beams (Colinear, Along Axes), Creating Plates, Creating Surfaces, Creating Solid Elements, Creating Structure.
- 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
- d. Loads Types of Loads: Self weight, Nodal, Member, Area, Floor, Plate, Surface and Solid; Load Generation, Load Combinations as per IS code.
- e. Performing Analysis Pre-Analysis, Problem Statistics, Joint Coordinates, Member Information, Material Properties, Support Information, Element & Solid Information; Performing Analysis
- f. Post Processing & Report Creation Output File, Post Processing Mode.

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.

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

# **Program Objectives**

The objectives of the FDP are:

• To provide hands on training on design and analysis of Multistorey building using STAAD Pro software for the faculty members.

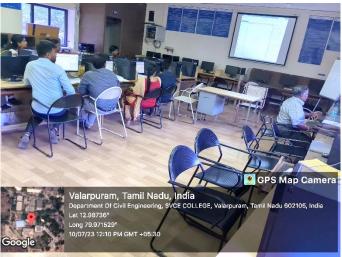
The following Program Outcomes (POs) and Program Specific Outcomes (PSOs) are addressed for the FDP on "Structural Design and Analysis using STAAD.Pro"

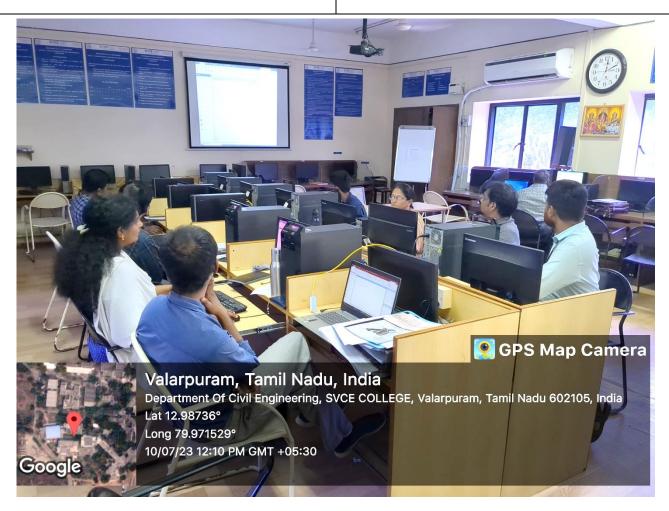
Particulars	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Structural Design and Analysis using STAAD.Pro	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>&gt;</b>	>			>				>	<b>√</b>	>

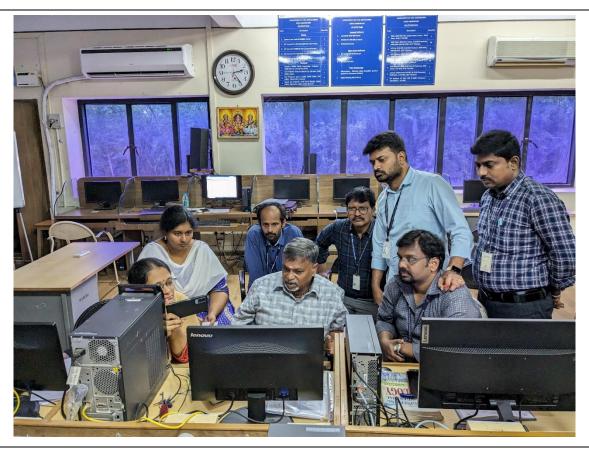
Feedback Link: <a href="https://forms.gle/wi4ZcYmmKuGBd8z77">https://forms.gle/wi4ZcYmmKuGBd8z77</a>

#### **SNAPSHOTS OF THE FDP**











# LIST OF PARTICIPANTS

S.No.	Name of the Faculty	Name of the College				
1	Dr. P. Venkateswara Rao	Sri Venkateswara College of Engineering				
2	Dr. R. Sathia	Sri Venkateswara College of Engineering				
3	Ms. Ruby Freya	Sri Venkateswara College of Engineering				
4	Mr.G. Arun	Sri Venkateswara College of Engineering				
5	Mr.R. Mathiyazhagan	Sri Venkateswara College of Engineering				
6	Mr.R. Kalaivannan	Sri Venkateswara College of Engineering				
7	Mr.S. Hariswaran	Sri Venkateswara College of Engineering				
8	Mr.A. Vijay Vignesh	Sri Venkateswara College of Engineering				
9	Mr.M. Venkatakrishnan	Sri Venkateswara College of Engineering				

# PARTICIPATION CERTIFICATE

	Bentley®  Advancing Infrastructure	
Certif	ficate of Accomplishment	
Th	HIS CERTIFICATE IS PRESENTED TO	
Faculty Developme	A. VIJAY VIGNESH  upon successful completion of ent Program - STAAD.Pro CONNECT Edition   EN   I	EN .
Product: STAAD.Pro	Version: CONNECT Edition	
Course Date: July 10, 2023  Training Partner: Techapps Consulting	Learning Units: 6	
Certificate ID: <u>1675021692</u>	Amit Trehan Director, User Learning Bentley Systems Inc.	Bentley Advancing infrastructure

Participants can download their certificates from the Bentley website.

Link: <a href="https://learn.bentley.com/app/Public">https://learn.bentley.com/app/Public</a>

# Feedback link - Faculty Development Program (FDP)

on Structural Design and Analysis using STAAD.Pro	- CIVII
Department - SVCE	
Feedback Form Department of Civil Engineering	
Faculty Development Program (FDP) on "Structural Design and Analysis using STAAD.Pro"	

Date: 10.07.2023 Speaker Name: Mr. R. Balamourougane Structural Manager STAAD Consultant TechApps Consulting, Chennai Kindly provide your valuable feedback. Email ID \* hariswarans@svce.ac.in Name of the Participant \* Hariswaran S Name of the Department \* Civil Engineering Mobile number (Whatsapp) 9965028892

agreement or disagreement with each of the following statements.						
	Strongly agree	Agree	Neutral	Disagree		
The session delivered the information I expected to receive.	•	$\circ$	0	$\circ$		
The subject matter was presented effectively.	$\circ$	•	0	$\circ$		
The pace and duration of the FDP was satisfactory.	0	•	0	$\circ$		
The resource person is knowledgeable.	•	$\circ$	0	$\circ$		
The resource person presented the information in a clear and logical manner		0	0	0		
Sufficient time was given for interaction	$\circ$	•	$\circ$	$\circ$		
The FDP was well organized	$\circ$	•	0	$\circ$		
As a result of this FDP, I gained new knowledge	•	$\circ$	0	$\circ$		
Are you interested in attendi  Yes  No	ing such programs org	ganized in future by the l	Department of Civil Eng	ineering of SVCE *		
Additional Comments/Feed	back *					

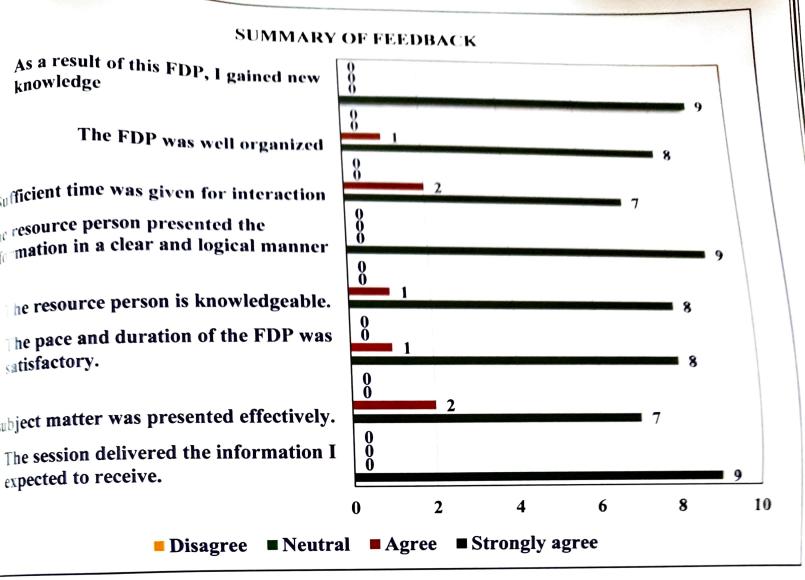
Please rate your satisfaction with the content of the Lecture delivered by the speaker by indicating your level of

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

# **SUMMARY OF FEEDBACK**

# **Total Number of respondents: 9**

Feedback	Strongly Agree	Agree	Neutral	Disagree
The session delivered the information I expected to receive.	9	0	0	0
The subject matter was presented effectively.	7	2	0	0
The pace and duration of the FDP was satisfactory.	8	1	0	0
The resource person is knowledgeable.	8	1	0	0
The resource person presented the information in a clear and logical manner	9	0	0	0
Sufficient time was given for interaction	7	2	0	0
The FDP was well organized	8	1	0	0
As a result of this FDP, I gained new knowledge	9	0	0	0



Prepared by

A.Vijay Vignesh (AP/Civil Engg.)

Coordinator

Approved by

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