



A Workshop on

# Microwave CST Studio Software Package Training and Hands on Experience

Organized by  
E&C Engineering Department,  
Sarvajani College of Engineering & Technology,  
Sarvajani University  
In  
Association with  
IETE Surat Subcenter

Technically Co-sponsored by,

Mobile and Wireless Technology Club (MWT) – E&C Engineering Department

## **The Team**

**Coordinator: Prof.** (Dr.) Pranav B Lapsiwala, Prof. Chhaya Suratwala

**Students Coordinators-** Vani Shekhadia, Vishwa Shekhadia from B.E. VI Semester, E&C Engineering, AC year 2024-25.

## **Details of Event**

**Event Type:** Workshop

**Event Platform:** Physical and Contact Mode

**Category:** Technical Activities, AC year 2024-25

**Schedule:** 18<sup>th</sup> March, 2025

**Aspirants:** Undergraduate Students of Engineering & Technology

**Accessibility:** Undergraduate Engineering Students

**No. of Present Participants:** Total 55 Students participation for different categories.

**Technical Sponsored:** IETE Surat Sub Center

**Technical Co-Sponsored:** Mobile and Wireless Technology Club, E&C Engineering Department, SCET-Surat.

**Resource Person:** Mr. Dhruvil Fulwala, Expert-Microwave CST Studio Suite

## About Workshop

The Electronics and Communication Engineering Department, in association with the IETE Surat Sub-Center and technically co-sponsored by the Mobile and Wireless Technology Club (MWTC) of the E&C Engineering Department, SCET-Surat, organized a workshop on “**Microwave CST Studio Software Training and Hands-on Experience**” at Sarvajani College of Engineering and Technology, Sarvajani University, Surat, on **March 18, 2025**.

The objective of the workshop was to introduce students to **Microwave CST Studio Suite** for **electromagnetic simulation of RF applications** and provide hands-on experience in **microstrip antenna design and analysis**. The session was conducted by **Mr. Dhruvil Fulwala**, who served as the expert and resource person for the workshop.

There are 55 participants has learned the Microwave CST studio suite for design of microstrip antenna, simulation and gain, bandwidth, radiation pattern and S-parameter analysis.

### Key Point of the Workshop.

1. **Installation of Microwave CST Studio suite:** - Students installed the academic version of CST Studio Suite in the E&C Engineering Department's computer lab under the guidance of Mr. Dhruvil Fulwala.
2. **Design of Microstrip Antenna:** - An expert demonstrated the case study of rectangular patch antenna design using CST Studio, along with the mathematical equations required to achieve the targeted resonance frequency.
3. **Analysis and Optimization of design parameters:** - Students gained experience in analyzing parameters such as resonant frequency, return loss, gain-directivity, VSWR, and bandwidth for the case study design. They also learned how to optimize patch parameters, including length and width, using the suggested feed technique, substrate height, and material to achieve the targeted performance.

### Outcomes

1. Fundamental learning of microwave engineering principle with case study of antenna design.
2. Learn to **set up, simulate, and analyze** microwave and RF structures.
3. Design rectangular path antenna, selection of feed network, substrate material and patch dimension for targeted frequency radiation.

## Information - Announcement – Registration Poster



**SARVAJANIK UNIVERSITY**  
SARVAJANIK COLLEGE OF ENGINEERING AND TECHNOLOGY  
Electronics and Communication Department  
Re-Accredited by NBA, New Delhi for 3 years, w.e.f July 2022

 **WORKSHOP ON MICROWAVE CST STUDIO SUITE**

- ✓ Software Package Training
- ✓ Hands-on Experience.

Guest Speaker : Mr. Dhruvil Fulwala,  
(Expert, Microwave CST Studio software package)

**Workshop Highlights:**

1. Introduction to CST Studio Suite
2. Hands-on Training with Antenna Design
3. Simulation & Analysis in RF Application
4. Q&A Session with the Expert

• **Date:** 18 March ,2025  
• **Timings:** 10:00 -1:30 pm  
• **Location:** EC Dept. (F-02)

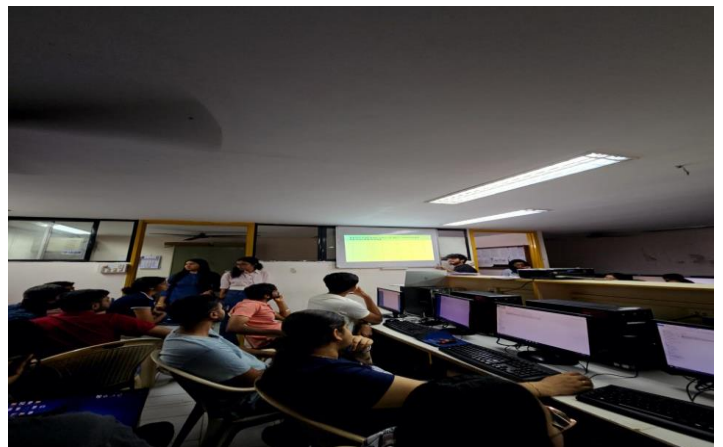
**Event Coordinator:**  
Vani Shekhadia  
Vishwa Shekhadia

**Faculty Coordinator:**  
Prof. (Dr.) Pranav Lapsiwala  
Prof. Chhaya Suratwala

**Head of Department**  
Prof. (Dr.) Chirag Paunwala

  
**REGISTER HERE**

## Glimpse of Workshop





Prof. (Dr.) Pranav B Lapsiwala / Prof. Chhaya Suratwala

SCET-Surat.