



# PPG INSTITUTE OF TECHNOLOGY

*Empowering total Technology*

Approved by  
AICTE, New Delhi,  
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Coimbatore -641 035.



## Department of Electronics and Communication Engineering

Academic Year: 2022- 2023 (Even Semester)

### Innovative Teaching Learning Practices – Participative Learning

Degree, Semester & Branch	: BE ECE
Course Code & Title	: EC8652 & Transmission Lines and Waveguides
Name of the Faculty member	: Mr S.V.Ramanan
Name of the Topic:	: Rectangular Waveguides
Name of the Innovative Practice	: Comparative Learning
Date & Time	: 11-05-2023 & 10.00am -11.00am

#### **Description:**

**Learning Outcomes:** Students will be able to Comprehend the characteristics of TE and TM waves

#### **Use of appropriate method:**

#### **Justification for choosing Activity:**

Students were able to know the different perspective representation of topics

#### **Effective presentation:**

Topic was given well advanced before the class and students must go through different sources to get more knowledge about the topic. On that particular day faculty member will explain about the particular topic with the different sources and gives a proper format.

#### **Reflective Critique:**

Students were interested to know more about the topics using different sources especially YouTube videos.

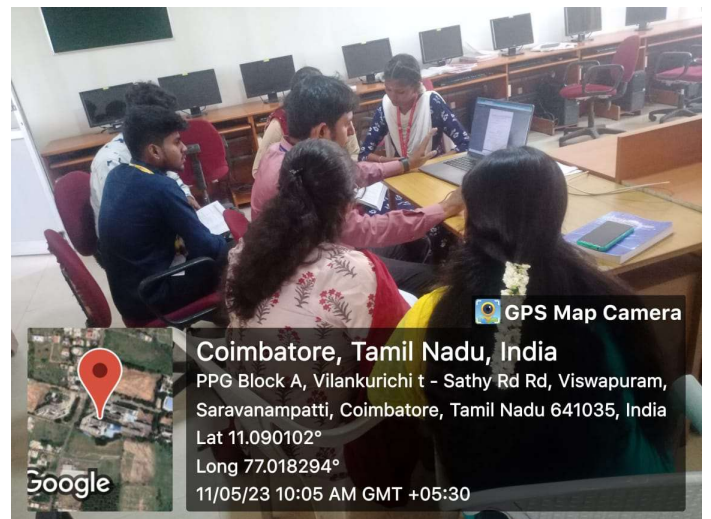
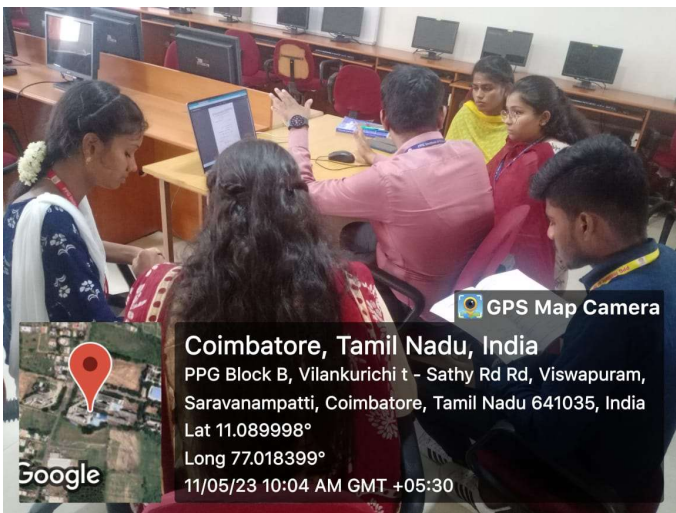
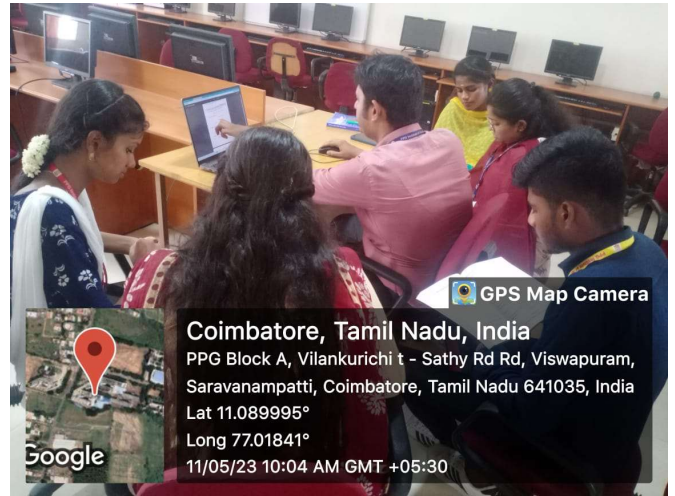
#### **Challenges:**

In some of the sources step by step analysis was not given, answer was given directly. This challenge was overcome by discussion with faculty member.

#### **Benefits:**

Since students are referring to more sources, they can able to gain more knowledge. Online video sources was very useful for them

## Activity Photo's:



**CO & PO Mapping :**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO4	3	3	3	2	2	-	1	-	2	1	1	2

**References:**

1. John D Ryder, "Networks lines and fields", Prentice Hall of India, New Delhi, 2005. (Unit I-IV)
2. Mathew M. Radmanesh, "Radio Frequency & Microwave Electronics", Pearson Education Asia, Second Edition, 2002 (Unit – V)
3. <https://resources.system-analysis.cadence.com/blog/msa2021-basic-rectangular-waveguide-theory>
4. <https://www.electronics-notes.com/articles/antennas-propagation/rf-feeders-transmission-lines/waveguide-modes-te-tm-tem.php>
5. YouTube videos eg : <https://www.youtube.com/watch?v=xKso91R9coI>



**Signature of Faculty Member**



**HOD**