# CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Chandubhai S Patel Institute of Technology V.T. Patel Department of Electronics & Communication

## **Report Summary**

# **Research Paper Writing Activity using Cadence**

**Date:** - 1 February, 2025 **No. of Participants:** - 7

Students	
7	

**Resource Person:** 1.Dr.Arpita Patel.

Associate professor, EC Department, CSPIT, CHARUSAT

#### **Objective:**

The activity aimed to provide hands-on experience in research paper writing, focusing on IEEE paper structure and simulation-based analysis using Cadence. It also guided students in selecting relevant topics for internships and final-year projects.

#### **Key Highlights:**

#### 1. Understanding IEEE Paper Structure

- Overview of key sections: Abstract, Introduction, Methodology, Results, and Conclusion
- o Importance of clarity, coherence, and technical accuracy in writing.

### 2. Simulation using Cadence

- o Hands-on simulation of an IEEE research paper circuit.
- o Demonstration of design, analysis, and result extraction using Cadence tools.

### 3. Circuit Analysis and Result Interpretation

o Discussion on performance metrics: power, delay, and area.

o Understanding how to present and interpret results effectively in a paper.

## 4. Step-by-Step Guidance on Research Paper Writing

- o Best practices for structuring content and citing references.
- o Strategies for improving the paper's technical and research impact.

#### 5. Exploration of Research Topics

- o A list of potential research areas for internships and final-year projects.
- o Discussion on emerging trends in VLSI and semiconductor research.

#### **Outcome:**

The session provided students with practical knowledge of writing and publishing IEEE-standard research papers. Participants gained insights into simulation-based research and were introduced to promising project topics.

#### **Conclusion:**

The Research Paper Writing Activity was highly beneficial in bridging the gap between theoretical knowledge and practical research. The hands-on approach using Cadence enabled students to strengthen their technical writing and analytical skills, preparing them for advanced research and career opportunities in VLSI design.







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