

Report on the Club Activity “Analog Mastery Challenge”

The department of **VLSI Design and Technology** conducted a **CLUB ACTIVITY** titled **Analog Mastery Challenge** on **12-11-2025** at **8:30 AM to 11:00 AM**, in **Room No 357 - Analog Laboratory**.

Objectives of the Event

The primary objectives of the event were:

- Strengthen foundational knowledge in analog circuit design.
- Encourage innovation and teamwork through design challenges.
- Bridge theory with real-world applications using simulation and hardware tools.

Event Overview

The club activity was held on November 12, 2025, starting with a brief session on rules and guidelines from 8:30 AM to 8:40 AM. This was followed by an engaging Design Challenge from 8:40 AM to 10:40 AM, where participants showcased their creativity and problem-solving skills. The event concluded with evaluation and results between 10:40 AM and 11:00 AM, recognising outstanding designs and efforts.

Mr Anil Kumar Baratam, Chief Digital Design Leader at Ampere, Bengaluru, Karnataka, Chief Guest for the session to evaluate the club activity performed by the students.

Club Activity Session

Figure 1 (upper) shows the picture of the students with the resource person, and in Figure 1 (lower), the resource person after dictating the rules and guidelines of the club activity.

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Club Activity

“Analog Mastery Challenge”

Resource Person
Anil Kumar Baratam
Ampere

Presided by
Dr. Ajayan K R
Principal, MVJCE

Venue	Date	Time
Room No. 356	12. 11. 2025	8:30 AM

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Near ITPL, Whitefield, Bengaluru 560067
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Figure 1: Resource person with the participants

Figure 2 represents the vibrant atmosphere of the Analog Mastery Challenge conducted in the electronics laboratory. Students are seen working in collaborative groups, engaging in hands-on circuit design and testing activities. This activity emphasises experiential learning, fostering innovation and confidence in analog design. Overall, the visuals highlight the successful execution of the event and the enthusiastic participation of students.

Program Details

The event was successfully conducted on **12th November 2025**. The schedule began at **8:30 AM** with an introductory session covering Rules, Guidelines, and Tool Setup Instructions. This session ensured that all participants were familiar with the competition framework and had the necessary tools configured for smooth participation.

Following this, from **8:40 AM to 10:40 AM**, the core activity of the day, the Design Challenge, took place. During this period, participants engaged in creative problem-solving and demonstrated their technical skills by working on innovative design solutions. The challenge encouraged collaboration, critical thinking, and application of theoretical knowledge to practical scenarios.

Finally, the event concluded with the Evaluation and Results session from **10:40 AM to 11:00 AM**. In this segment, submissions were assessed based on predefined criteria, and feedback was provided to participants. The winners were announced, marking the successful completion of the event and recognising outstanding contributions.

Day	Time	Session Details
Tuesday, November 12, 2025	8:30 – 8:40 AM	Rules and Guidelines, Instructions
	8:40 – 10:40 AM	Design Challenge
	10:40 – 11:00 AM	Evaluation and Results

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Figure 2: Students in different groups actively performing the club activity task.

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(a) Winning team and runner-up team receiving their certificates from the external experts

CCCC			
1 st (Winner Team)		2 nd (Runner up Team)	
USN	Name	USN	Name
1MJ24VL004	ADITYA A SHET	1MJ24VL001	ABHISHEK
1MJ24VL016	BHASKAR S P	1MJ24VL006	ANEESH
1MJ24VL035	P KOUSHIK	1MJ24VL021	GURURAJ
1MJ24VL045	VISHAL RAM P	1MJ24VL024	JAYANTH

Table 1: Winners and Runner-ups Team

Outcomes and Impact

Here are eight detailed outcomes of the Analog Mastery Challenge activity:

- **Enhanced Conceptual Understanding:**

Students gained a deeper understanding of analog electronics principles, including amplifiers, filters, oscillators, and signal conditioning circuits.

- **Improved Circuit Design Skills:**

Participants developed hands-on expertise in designing and implementing analog circuits using both simulation tools and hardware setups.

- **Application of Theory to Practice:**

The activity successfully bridged theoretical knowledge with real-world applications, reinforcing classroom learning through experiential tasks.

- **Innovation and Creativity:**

Students demonstrated innovative approaches in solving design challenges, fostering creativity in circuit design and problem-solving.

- **Teamwork and Collaboration:**

The challenge promoted effective teamwork, communication, and collaborative problem-solving among participants.

- **Exposure to Industry-Relevant Practices:**

Through the introductory talk and expert feedback, students gained insights into industry standards and best practices in analog design.

- **Critical Thinking and Analytical Skills:**

Participants enhanced their ability to analyse specifications, troubleshoot circuits, and optimise designs under time constraints.

- **Recognition and Motivation:**

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The evaluation and prize distribution provided recognition for outstanding performance, motivating students to pursue excellence in analog electronics.

Conclusions

The Analog Mastery Challenge successfully achieved its objectives of enhancing students' understanding of analog electronics through experiential learning. The event provided a platform for participants to apply theoretical concepts to practical circuit design, fostering innovation and problem-solving skills. Through collaborative teamwork and hands-on engagement, students gained valuable exposure to industry-relevant practices and tools. The evaluation and feedback sessions offered constructive insights, motivating participants to strive for technical excellence. Overall, the activity not only strengthened foundational knowledge but also inspired creativity and confidence in analog design, making it a highly impactful and enriching experience for all involved.

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MVJ College of Engineering