

REPORT ON PRINTED CIRCUIT BOARDS WORKSHOP 11/09 - 12/09/2024

The PCB Workshop, organized by the ECE Department in association with IEEE Sreyas Student Branch, was held at the Sreyas Institute of Engineering and Technology, Hyderabad on the 11th and 12th of September, 2024. The workshop aimed to provide both theoretical knowledge and practical hands-on experience in PCB design and circuit simulation, with 80 students from the II and III year ECE department participating.

Inauguration:

The two-day workshop commenced with an inaugural ceremony held in IB-202. The dignitaries present included Principal Dr. K. Sagar, Academic Dean Prof. B. Sreenivasu, HoD of the ECE Department Prof. Ch. Maruthi Rao, and the workshop speaker Md. Nabi Shareef, who together inaugurated the event by lighting the ceremonial lamp.

In their speeches, they emphasized the importance of PCB design in electronics and encouraged students to actively participate, showcasing the growing role of hardware and software integration in today's technological landscape.

Day 1: Hardware Design

The first day of the workshop focused on hardware, where students were introduced to PCB design from scratch. They learned how to design a Printed Circuit Board (PCB) layout, which was followed by a hands-on session where students soldered a variable switch circuit. By the end of the day, each student had successfully created a working model of their design. This session enabled participants to gain practical insights into soldering techniques, component placement, and circuit testing, solidifying their understanding of PCB hardware development.

Day 2: Software and Simulation

On the second day, the focus shifted to software. The students were introduced to circuit design software, where they learned the process of designing circuits, including how to search for components, place and connect them, and ultimately run simulations to test the functionality of their designs. The session provided a detailed overview of how to transform theoretical designs into virtual simulations, giving

participants a complete understanding of the PCB design lifecycle from hardware to software.

Conclusion:

The workshop concluded with a review of the two-day activities, followed by speeches from the dignitaries, who praised the students engagement and the skills they had acquired. Certificates were distributed to all participants, marking the successful completion of the workshop.



