

Maharaja Surajmal Institute of Technology, New Delhi

Electrical and Electronics Engineering Department

A Report on

“PCB DESIGNING”

The Department of Electrical and Electronics Engineering organized an expert lecture on **“PCB Design using KiCAD”** for III and V semester EEE students on **September 03, 2025**. The lecture was delivered by **Mr. Vaibhav Bhardwaj, Prime Minister’s Research Fellow Scholar, IIT Delhi**.

The session was aimed at providing students with an introduction to the fundamentals of Printed Circuit Board (PCB) design. The speakers began with a detailed overview of PCBs, highlighting their significance, usage, and wide-ranging applications in electronic devices. Students were introduced to the multilayered structure of PCBs, including substrates, conductive traces, vias, and solder masks. The lucid explanations, along with illustrative diagrams, helped students gain conceptual clarity on the working and architecture of PCBs.

The lecture further included an introduction to **KiCAD**, a popular open-source PCB design software. The speakers explained its interface, features, and advantages over proprietary tools. They also emphasized the relevance of KiCAD in academic projects and industry applications.

The department is planning to organize a **12-hour Hands-On Workshop on PCB Designing**, to be conducted in weekly sessions of **2–4 hours** each.

The lecture concluded with students gaining valuable insights into PCB fundamentals and software tools, looking forward to the forthcoming hands-on workshop to deepen their practical skills.



