



SREE VENKATESWARA COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi and Affiliated to Jawaharlal Nehru Technological University – Anantapur)

GOLDEN NAGAR, NH5 BYPASS ROAD, NORTH RAJUPALEM, KODAVALURU (V&M), SPSR NELLORE

email: sving9@gmail.com

website : www.svcn.ac.in

Date: 20-02-2017

REPORT

The Electrical and Electronics Engineering department has organized a **Workshop** on **“Printed Circuit Board Design“** from **17th February 2017 to 18th February 2017**.

The resource person was K. Anish, Project Manager, Lets Learn Guru, Nellore. The 2nd year B.Tech students of EEE department have attended this workshop.

Number of students participated in this workshop: 59

The resource person shared his insights, real life scenarios, practical use cases and their solutions on the Printed Circuit Board Design.

On the first day the session started with keynote lecture on Printed Circuit Board and future of connected world. It also provided the insights of Printed Circuit Board for Light Emitting Diodes, medical devices, industrial equipment, Aerospace components, safety and security equipment and automotive components.

The second session began with that Before PCB design, circuit designers are recommended to get a tour of a PC board shop and communicate with fabricators face to face over their PCB manufacturing demands. It helps prevent designers making any unnecessary errors from getting transmitted during the design stage. However, as more companies outsource their PCB manufacturing inquiries to overseas suppliers, this becomes impractical. On this account, we present this article in order to provide a proper understanding of PCB manufacturing steps. Hopefully it gives circuit designers and those new to PCB Industry a clear view on how printed circuit boards are manufactured, and avoid making those unnecessary errors.

The next session continued with the Importance of Printed Circuit Board design and he covered Design rules of Printed Circuit Board, Making of PCB, Types of PCBs it includes Single side bond PCB, Double side bond PCB and Multi layer bond PCB. He also explained the procedure to design PCB which includes various steps like designing of PCB, Printing of PCB, printing of copper for interior layers, getting Rid



SREE VENKATESWARA COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi and Affiliated to Jawaharlal Nehru Technological University – Anantapur)

GOLDEN NAGAR, NH5 BYPASS ROAD, NORTH RAJUPALEM, KODAVALURU (V&M), SPSR NELLORE

email: sving9@gmail.com

website : www.svcn.ac.in

of unneeded copper, inspection and layer alignment, laminating PCB layers, drilling, PCB plating, etching, finishing PCB and electrical reliability testing.

In the later session he planned to provide hands on experience with PCB design and applications. Students were designed PCBs for blinking of LED and automatic sensing of water level detector with buzzer. All the students were participated in design of PCBs and they interacted with the resource person during the design process.

PHOTO 1



Resource person explaining the importance of PCB



SREE VENKATESWARA COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi and Affiliated to Jawaharlal Nehru Technological University – Anantapur)

GOLDEN NAGAR, NH5 BYPASS ROAD, NORTH RAJUPALEM, KODAVALURU (V&M), SPSR NELLORE

email: sving9@gmail.com

website : www.svcn.ac.in

PHOTO 2



Training the challenges and applications of PCB

CONVENOR

HOD



SREE VENKATESWARA COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi and Affiliated to Jawaharlal Nehru Technological University – Anantapur)

GOLDEN NAGAR, NH5 BYPASS ROAD, NORTH RAJUPALEM, KODAVALURU (V&M), SPSR NELLORE

email: sving9@gmail.com

website : www.svcn.ac.in

Date: 27-09-2017

REPORT

The Electrical and Electronics Engineering department has organized a **Workshop** on “**MATLAB fundamentals**” from 25th September 2017 to 26th September 2017. The resource person was Mr. Anshu Pandey, Trainer, Innovians Technology, Bangalore. The 2nd year B.Tech students of EEE department have attended this workshop.

Number of students participated in this workshop: 65

The resource person shared his insights, real life scenarios, practical use cases and their solutions by using MATLAB.

On the first day the session started with keynote lecture on MATLAB and future of connected world. It also provided the insights of MATLAB applications for deep learning control systems, power electronics, power systems, image processing, signal processing and network simulations.

The second session began with that MATLAB (matrix laboratory) is a multi-paradigm numerical computing environment and proprietary programming language developed by Math Works. MATLAB allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces, and interfacing with programs written in other languages. Although MATLAB is intended primarily for numerical computing, an optional toolbox uses the MuPAD symbolic engine allowing access to symbolic computing abilities. An additional package, Simulink, adds graphical multi-domain simulation and model-based design for dynamic and embedded systems.

The next session continued with the Simulation based tools for power systems and how to draw the simulation block diagrams in MATLAB. He also explained basic functions which are used for writing program for electrical systems in MATLAB in the form M-



SREE VENKATESWARA COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi and Affiliated to Jawaharlal Nehru Technological University – Anantapur)

GOLDEN NAGAR, NH5 BYPASS ROAD, NORTH RAJUPALEM, KODAVALURU (V&M), SPSR NELLORE

email: sving9@gmail.com

website : www.svcn.ac.in

Files. He also discussed current status and future prospect of MATLAB in electrical systems.

In the later session, he gave a task to the students that are the most useful to the students for practice and interaction with the resource person. It includes practice on simulation of power systems, power electronics. The resource person discussed with real time examples and the session was made really interactive by providing an opportunity to suggest a solution to real life scenario.

PHOTO 1



Resource person explaining the importance of **MATLAB fundamentals**

PHOTO 2



Training the challenges and applications of **MATLAB**

CONVENOR

HOD