



# GURU NANAK INSTITUTE OF TECHNOLOGY

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DATE: 25-08-17

## DEPARMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CIRCULAR

The Department of Electronics and Communication engineering of GNIT is organizing a two day Workshop on “**PCB Design and Fabrication**” which is scheduled on 31-08-2017 & 01-09-2017.

In this connection I request you to circulate this among Teaching Staff of your department. The last-date for registration is 28-08-17.

**PRINCIPAL**

**HOD-ECE**



Accredited by  
National Board of Accreditation  
(CSE, ECE, ME)



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# **GURU NANAK INSTITUTE OF TECHNOLOGY**

(Approved by AICTE New Delhi, Affiliated to JNTU Hyderabad) Campus: Ibrahimpatnam, R. R Dist.-501 506.

## **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**In Association with**

**IETE STUDENTS FORUM, GNIT & ECE DEPARTMENT STUDENT ASSOCIATION &  
PGP ELECTRONICS PVT. LTD., HYDERABAD.**

## **WORKSHOP ON**

# **PCB DESIGN AND FABRICATION**

**31-08-2017 & 01-09-2017**

## **REPORT ON TWO DAY WORKSHOP ON PCB DESIGN AND FABRICATION(31-08-2017 & 01-09-2017)**

On behalf of Department of ECE, GNIT in association with IETE Students Forum and ECE Department Association, we have organized a two day workshop on “PCB DESIGN AND FABRICATION” on 31-08-2017 and 01-09-2017 in collaboration with PGP Electronics Pvt. Ltd. The IETE ISF in Electronics & Communication Engineering department arranges the various kinds of Workshops on continuous basis to enhance student’s practical & technical skill and to make them compatible with industry.

The workshop was aimed to provide knowledge about Complete PCB Designing using simulation tool to test electronics & electrical circuit in software environment and also its Fabrication, PCB design software named Cad soft EAGLE & to make physical PCB at home so that any student can make project on his own. Almost 50 students from II ECE and IETE ISF members of our college have participated in the workshop.

Following content are covered in workshop:

- ✓ Schematic Design
- ✓ Component Footprint Design
- ✓ Integrated Library Design
- ✓ PCB Design & Routing
- ✓ Etching of PCB
- ✓ Soldering of Components on to PCB.

Mr. Rajiv Patnaik , Technical manager, PGP Electronics along with his team, Mr. Mohd. Shareef, Mr. Prashant, Mr. Kranthi and Ms. Kiranmayee, have coordinated & executed 2-days of PCB Design workshop appreciably to make it successful to enhance student’s skill level. After attending this workshop students have expressed about their capability of Designing Special purpose PCB Of any Electronics Project. This workshop will be helpful for students for circuit development of their final year project. Total 50 students have Participated in this workshop , where everyone has got a chance to work individually on a separate PCB.

The duration of this workshop was two days, with seven hour session each day in a total of fourteen hours properly divided into different hands on sessions. The entire participants were divided into two batches of 25 students each and parallely both the software and hardware sessions were conducted on both the days.

On 31<sup>st</sup> August,2017 the first session of expert talk started at 10:00 A.M by Mr. Mohd. Shareef and Mr. Rajiv Patnaik.They started with introduction of PCB Designing, Benefits of the workshop and its applications. They explained Schematic Design of Circuit on software Cadsoft EAGLE, benefits of using Cadsoft EAGLE, and pointers to make precise schematic design. The afternoon session of Hands-on started at 1:30. P.M., where the participants are provided with laboratory sessions on Schematic design & PCB layout design on Cad soft EAGLE. The participants also tried various demo circuits provided.

On 1<sup>st</sup> September 2017, The First session of expert talk started at 9:30 A.M. by Mr. Prashanth and Mr.Kranthi. They gave introduction of Fabrication Environment. They also explained about the process of

converting from File to Film, Printing the Inner layers, Removing the Unwanted Copper, Layer Alignment and Optical Inspection, Lay-up and Bond .

The second session of expert talk started at 1:30 P.M. by Ms. Kiranmayee. She explained about PCB Soldering procedure & do's and don'ts of making PCB. She also explained various circuits which can be used often by students and motivated students to keep designing such circuits.

On the last day, a valedictory Session and certificate distribution started at 3.30 PM. Dr. S. Sreenatha Reddy, Principal, GNIT , Dr.N.R.M. Reddy, Professor in Civil, Vice Principal, GNIT, Prof.B.Kedarnath, HOD-ECE,GNIT, Mr. I. Sharath Chandra, Asst. Prof., ECE, Coordinator of the Workshop, Mr. Rajiv Patnaik, Technical manager, PGP Electronics has presided over the function. Feedbacks regarding workshop are provided by various students. All the students responded that they have learned and had hands on experience in designing a PCB. They were very excited about participation in this workshop and requested for more workshops in similar way so that they can simultaneously gain the practical knowledge.

Dr. Sreenatha Reddy, Dr. N.R.M. Reddy, and Prof. B. Kedarnath awarded the certificates to all the participants by hand. They personally congratulated every student for participating in the event and making it successful.

The vote of thanks & concluding speech to motivate the student to participate in such workshop was given by the IETE ISF Coordinator and Coordinator of the Workshop, Mr. I.Sharath Chandra. He thanked the management of Guru Nanak , Sardar Tavinder Singh Kohli, Chairman, GNI, Mr. Gagandeep Singh Kohli, Vice Chairman, GNI, Dr. H.S.Saini, Managing Director of GNI , Dr.,S. Sreenatha Reddy , Principal of GNIT, and the entire faculty of ECE department, GNI for extending their continuous and valuable support in organizing and conducting these kind of workshops. Special Thanks are extended to the office bearers of IETE Hyderabad Section, for extending their enduring support and encouragement.

He thanked every student for their active participation and interest in participating in the workshop and mentioned about the activities conducted in the college by the department. He promised that department will continue its assistance in conducting these sort of workshops and seminars in future too. He thanked the technical support given by PGP Electronics Pvt. Ltd. He personally felt very happy for the response of the company and satisfied with the way they conducted the workshop. He mentioned about the marvelous support given by the HOD ECE Prof.B.Kedarnath and the department in conducting these workshops.



## GLIMPSES OF THE WORKSHOP

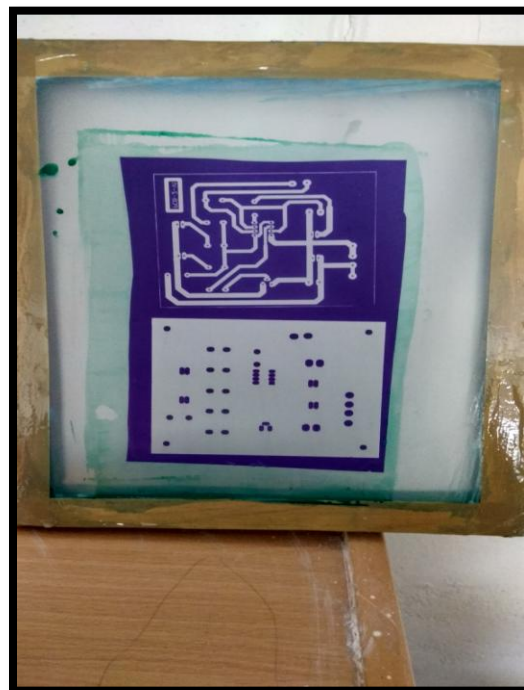


**CAD DESIGN By the Participants**

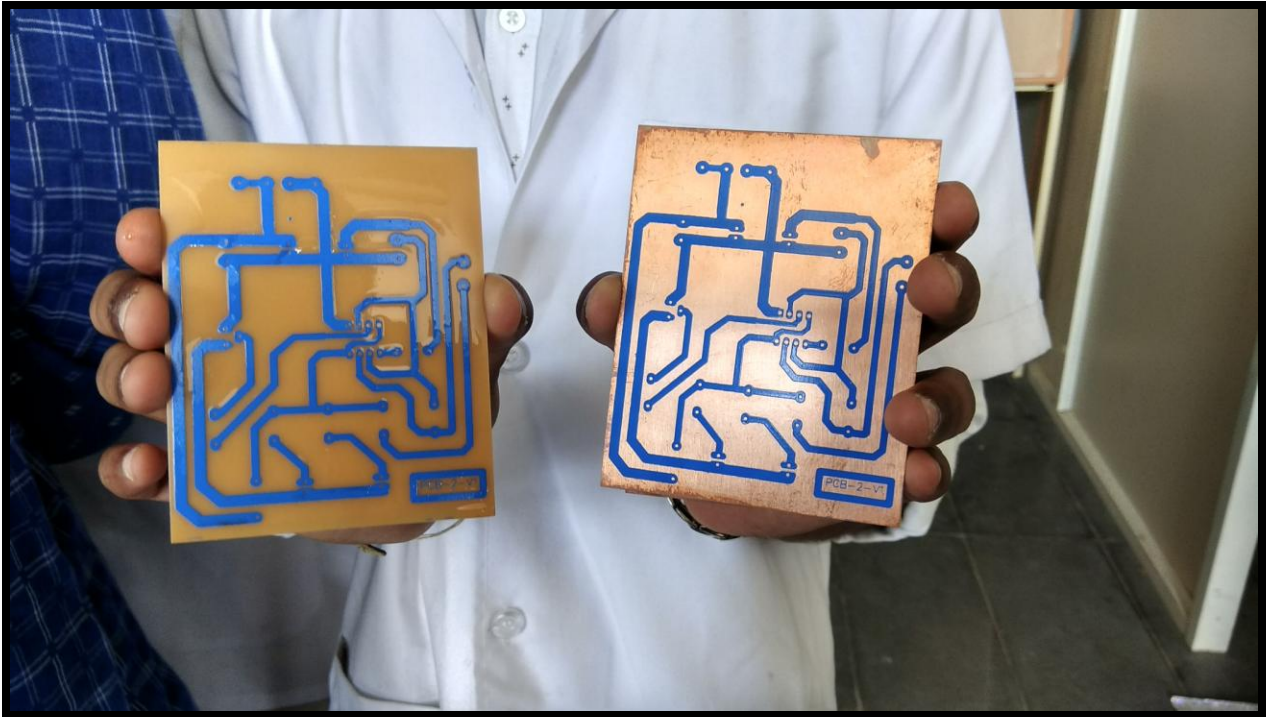




Process of Making a file into a Film







Process of Printing the Inner layers and Removing the Unwanted Copper



**Drying**



**Drilling**





**Soldering**





**Mr. I. Sharath Chandra, Coordinator of the Workshop Welcoming the Guests and addressing the Gathering**



**Dr. S. Sreenatha Reddy, Principal, GNIT Addressing the August Gathering**





**Dr.N.R.M. Reddy ,Vice Principal, GNIT giving Inspirational Speech**



**Prof.B.Kedarnath, HOD ECE, GNIT addressing the gathering**





**Dignitaries giving Away the Certificates to the Participants**



# PGP Electronics Private Limited

Kushalguda, Hyderabad 500 062.



Two days workshop on  
**PCB DESIGN AND FABRICATION**

## Certificate

This is to certify that Ms/Mr. .... MD SHAZIA SAMREEN .....

student of ..... II ..... Year ..... ECE ..... Branch has participated in the two days workshop on "PCB Design And Fabrication" held on 31st August 2017 & 1st September 2017, by the Department of Electronics and Communication Engineering at **Guru Nanak Institute of Technology**, Ibrahimpatnam, in collaboration with **PGP Electronics Private Limited**, Hyderabad.

**Md. Nabi Shareef**  
Workshop Co-ordinator  
PGP Electronics Pvt. Ltd.

**Mr. I. Sharath Chandra**  
Co-ordinator

**Prof. B. Kedarnath**  
HoD, ECE

**Dr. S. Sreenatha Reddy**  
Principal, GNIT