



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

UNIVERSITY COLLEGE OF ENGINEERING, VIZIANAGARAM

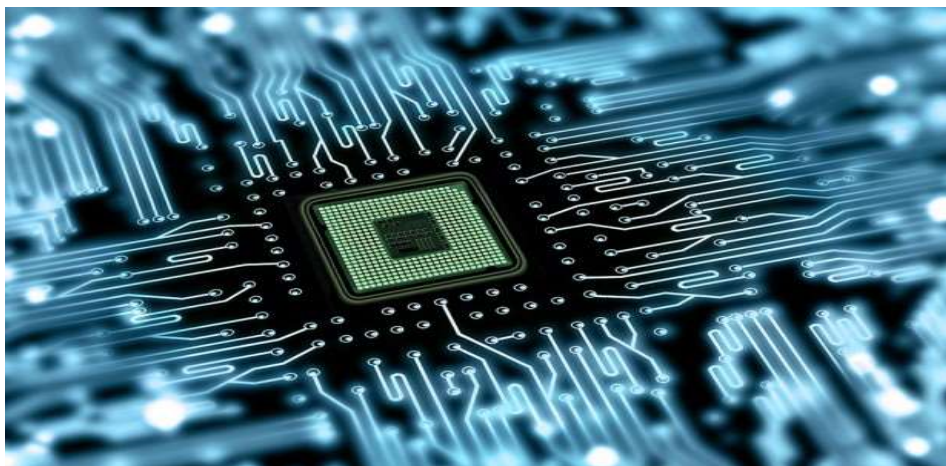
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ECENTRA

A TWO-DAY NATIONAL LEVEL TECHNICAL SYMPOSIUM

PCB DESIGNING



ABOUT THE WORKSHOP :-

For any electronics product, printed circuit board (PCB) forms the basic foundation for interconnecting and packaging. PCBs are used to mechanically support and electrically connect electronic components using conductive pathways, tracks or signal traces etched from copper sheets laminated on a non-conductive substrate.

PREREQUISITES :-

- Basic electronics knowledge.
- Basic knowledge about circuit designing.

SESSION 1

INTRODUCTION:-

- PCB & Analog Circuit Designing.
- Basic of Hardware & Software.
- New & Upcoming Technologies.
- PCB Designing Software (P Spice & Eagle).

DIFFERENT CIRCUIT ON PCB DESIGNING SOFTWARE:

- DC/AC Analysis of circuits. RC, RL, RLC Circuits & Resonance
- Transformer Designing
- Diode & Application Circuits
- Clipper and Clamper Circuit
- BJT/JFET Amplifier Designing
- Operational Amplifiers & Application Circuits
- Flip Flops Designing
- Analog Filter Designing
- Voltage Regulators & Power Supply Circuit Design Oscillator Circuit.

SESSION 2

TRAINING OF SOLDERING & DE-SOLDERING TECHNIQUE:-

- Soldering Techniques
- Different Methods of Soldering
- How to solder different components

PCB DESIGNING:-

- Making circuit on PCB Design Software
- Deploying basic circuits from paper to schematic window
- Making Board Layout
- Checking for errors and finalizing layout
- Etching process
- Drilling and Soldering methods of PCB

TESTING AND TROUBLESHOOTING:-

- Testing and troubleshooting once your PCB is ready.
- Various trouble shooting techniques.

WORKSHOP DETAILS

WORKSHOP FEE:-

- **600/- Per Person.**
- Each team can consists maximum of 5 members (3000/- per team).

LAPTOP NEEDED:-

- Yes, each team should carry their laptop with the software listed above or the software will be provided at the time of workshop.
- Software (eagle) can be installed beforehand (or) we'll provide at the time of registration.

LEARNIG OUTCOMES:-

- Soldering and de-soldering techniques.
- Understanding complex circuits.
- Designing PCB.
- Troubleshooting the PCB.
- Drilling Techniques.

CO-ORDINATORS

- G.BHAGATH - 8466082021
- A.VENKATA GOVARDHAN - 7075640122
- K.S.D.POOJITHA – 7659822333

- K.VIJAYVARDHAN – 8106467917
- A.SRIKANTH – 8331932134

-----X-----