



Sandip foundation's

**Sandip Institute of Technology and
Research Centre, Nashik
Department of Electrical Engineering**



Date : 18/04/2022

Notice

Department of Electrical Engg is going to conduct a free of cost Workshop on **"Industrial Approach In Electrical And Electronics"** on the date **21/04/22 to 22/04/22** for SE student's. Interested students enroll their name to Prof. R.B.Sadaphale before **20/04/2022**.

Time : 10:30 AM To 5.00PM

Venue :For TH- SE Classroom Electrical Engineering Dept

HOD
Electrical

Head of Department
Electrical Engineering
Sandip Institute of Technology and Research Centre
Mahiravani, Nashik-422213





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Theory Course Content- Topics covered during the Workshop -

□ Electronics Components Study :

Identification - Name, Symbol, Unit, Physical appearance, size, weight

Testing using DMM- Check working conditions & compare with std. values, Possible faults with respective reading, Detects the faults.

Working - Function of component and its application

Ratings -Specifications, Available range, Safe limit use

Availability -Market, Name of the shops in city, district, Mumbai, Price in retail & Wholesale of various components, some are listed below.

1	Carbon Film Resistor (CFR)	21	Transformers assorted- Step Down
2	Metal Film Resistor (MFR)	22	Relay- General purpose various shapes, sizes
3	Ceramic Resistor	23	Solenoid- Valve, Latch, Switch
4	Wire Wound Resistor	24	Loud Speaker
5	Tapped Wire Wound Resistor	25	General Purpose Diode
6	Presets all types, Vert, Hori. Small, big	26	Point Contact Diode- Signal Diode
7	Multiturn preset Vertical, Horizontal	27	LEDs assorted sizes & colors, Focus
8	Pot- PVC, Metal Shaft Liner, Log	28	Zener Diode
9	LDR all sizes & packages	29	Power diode
10	Thermistor NTC, PTC diff. shapes	30	Metal Diode
11	Thermostat	31	Photo Diode
12	Ceramic Capacitor	32	Photo Transistor
13	Paper Capacitor	33	BJT Transistors NPN, PNP
14	Polyester capacitor	34	Power Transistor
15	Mica Capacitor	35	SCR
16	Tantalum capacitor	36	Diac
17	Electrolytic capacitor	37	Triac
18	Super Capacitor	38	MOSFET P Channel, N Channel
19	Inductor	39	IGBT
20	CT- Current Transformer	40	Fuse & Connectors



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Construction-

PCB -Different types, PCB Designing manually, as well as by software (Express PCB)
Image exposure technique using Laser Printer

Identification of Soldering Aids- Soldering Iron ratings, Solder metal proportions, flux, acid their use.

Circuit Assembly- Soldering skill tips- use of proper soldering Iron, Metal, Flux, Cleaning, Tinning etc.

Soldering -Use of proper metals, Soldering Iron, Proper required time to solder.
PCB circuit study, Components lead cleaning, placement of proper component in right polarity, Soldering skill tips, lead cutting aftersoldering.

Connections -Power +ve, -ve, Ground, -Input-Output using std. color code wires.

Desoldering - Desolder pump, Desolder wire & their practice. How to remove (Desolder) components.

Project -Assembly of few simple project, their connection & testing,
Representation of project to get easy demonstration for user



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Workshop Report

Academic Year 2021-22

Event Title: Industrial approach in electrical and electronic

Event Date: 21/04/22 to 22/04/22

Event Conduction Duration: 10.00 am to 5.00 pm

Event Venue: SE Classroom , Electrical Engg Dept, E Building, SITRC

Event guest Resource Person Details: Er.Sanjay Chaudhari Director,
Electronic Study Circle,Nashik

Name of Event Co-ordinator: Prof.R.B Sadaphale

No of Participants: SE: 44 Students

Event Objective:

- 1) Needs of industry and demands in the field of electrical and electronic engineering
- 2) Identify various electrical and electronic equipment , circuits and their sizes
- 3) Working of electrical and electronic component
- 4)

Outcome:

- 1) Calculate the rating of Electrical and electronic Equipments.
- 2) Identification of electrical and electronic components and its sizes.
- 3) PCB designing

Photos of Event:



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