

# GUJARAT TECHNOLOGICAL UNIVERSITY

B.E Semester: 3

## Instrumentation and Control Engineering

Subject Code 131703

Subject Name Instrumentation Workshop

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After completing this course students should be able to –

1. Measure voltage, current, power, power factor for single and three phase supply
2. Do fan wiring, tube light wiring, staircase wiring
3. Do instrument panel wiring with various accessories
4. Wired MCB, ELCB
5. Prepare specifications for tools, wires, cables, switches, electronic components for a given application
6. Prepare electrical circuit diagram using IEEE standard symbols.
7. Identify open circuit, short circuit faults
8. Solder and de-solder electronic components on PCB
9. Test assembled electronic circuit for various parameters and faults

In performing above task they should be able to use tools such as pliers, cutters, strippers, screw driver, crimping, soldering iron, de-soldering pump, multi-meter, tester, series lamp, megger, clamp-on-meter

Students are also required to prepare and submit a laboratory report on instruction / demonstration given by instructor and workshop activities done by students as a part of term work.