

IC160P Electrical Systems Lab

Credit: 0-0-3-2

Prerequisite: Consent of the faculty member

Students intended for: B.Tech

Elective or Core: Core

Semester: Even/Odd

Course content:

- Lab 1: Introduction to Spice software, familiarization with different analysis methods (ac, dc and transient), familiarization with datasheets of components
- Lab 2: Familiarization with various measuring instruments such as ammeter, voltmeter, wattmeter, tachometer, multimeter, oscilloscope
- Lab 3: Circuit analysis using Spice
- Lab 4: Transient analysis of RLC circuit
- Lab 5: Analysis of magnetically coupled circuit
- Lab 6: Frequency response of RLC circuit
- Lab 7: Design of passive filters
- Lab 8: Measurement of power in three-phase circuit using two wattmeter method
- Lab 9: Open circuit and short circuit test of transformer
- Lab 10: Characteristics of dc shunt generator
- Lab 11: To measure earthing resistance by three probe method