Course code	Course Name	L-T-P - Credits	Year of Introduction
EE235	Electrical Technology lab	0-0-3-1	2016

Prerequisite: EE209 Electrical technology

Course Objectives

 To impart working knowledge on electrical circuits, A C machines, DC machines and transformers.

List of Exercises/Experiments : (Minimum 10 experiments are mandatory)

- 1. Verification of Thevenin's theorem
- 2. Verification of Norton's theorem
- 3. Verification of Superposition theorem
- 4. Verification of Maximum power transfer theorem
- 5. Power measurement in 3 phase balanced circuits
- 6. Power measurement in 3 phase unbalanced circuits
- 7. Load test on DC shunt motor
- 8. Load test on DC series motor
- 9. Speed control of DC shunt motor
- 10. Open circuit characteristics of DC series motor.
- 11. Open circuit characteristics of dc shunt motors
- 12. Swinburne's test and separation of losses in DC machine.
- 13. Load test on single phase transformer
- 14. Load test on 3-phase induction motor
- 15. No load test on 3- phase induction motors.

List of major equipment

DC shunt motor, DC series motor, DC series motor, single phase transformer, 3-phase induction motor, Watt meters, Ammeters, Voltmeters, Tachometers.

Expected outcome.

• On completion of this lab course, the students will be able to understand the concept of electric circuits and the performance characteristics of electrical machines.

Text Book:

Theraja B.L., Theraja A.K. *A Text Book of Electrical Technology*, Vol.II "AC & DC Machines", publication division of Nirja construction & development (p) Ltd., New Delhi.