Course Name Basic Electrical Engineering Laboratory

Course Code EE191 & EE291

Course Credit 2

Contact Hour 3P

Prerequisite Basic Electrical Engineering (EE101)

Course Objective

The objectives of this course are

1. To prepare the students to have a basic knowledge of d.c. machine, three phase induction motor and transformers.
2. Information to supplement to the Electric Machines I (EE 401) course.
3. The ability to conduct testing and experimental procedures on different types of electrical machines.
4. To give a chance to students to practice different types of wiring and devices connections.
5. The capability to analyze the operation of electric machines under different loading conditions.

Course Outcome

On completion of the course students will be able to

1. Analyze the response of any electrical circuit and network.
2. Troubleshoot the operation of an electrical apparatus.
3. Select a suitable measuring instrument for a given application.
4. Gain the knowledge of various parts and test of d.c. machine and transformer.
5. Incorporate the measuring error with actual value and calibrate the instruments.

CO Mapping with departmental POs

H: High, M: Medium, L: Low

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1	L	M		M								
CO 2		H		M					M			
CO 3		H		H	L				M			
CO 4		H		M								
CO 5		M		H	L				M			

Course Content

List of experiments

1. Characteristics of Fluorescent lamps.
2. Characteristics of Tungsten and Carbon filament lamps.
3. Verification of Thevenin's theorem.
4. Verification of Norton's theorems.
5. Verification of Superposition theorem.
6. Study of R-L-C Series circuit
7. Speed Control of DC Shunt Motor.
8. Study of the equivalent circuit of a single phase transformer.
9. Calibration of MI type Ammeter and Voltmeter.