Course Code: EIPS - 102 **Course Title: Basic Electrical and Electronics Lab**	
Number of Credits: 03 **Total Hours: 84** **Total Marks: 75**	
Prerequisites for the course	
Should have some basic knowledge of electrical components such as resistor, capacitor, inductor, transformer, relay, switches etc.	
Objectives of Course	
This course is intended to provide the laboratory training and designing of basic electrical circuits	
Course Content	**84 Hours**
Expt. 1: Getting familiar with measuring instruments (Voltmeter, Ammeter, DMM, Current source, Voltage Source) **Expt. 2:** Study of AC waveform parameters **Expt. 3:** Finding the values of resistance based colour codes **Expt. 4:** Parallel and series combination of resistor **Expt. 5:** Verifying Ohm's law and Kirchhoff's law **Expt. 6:** Series and parallel combinations of capacitor **Expt. 7:** Charging and discharging of capacitors **Expt. 9:** Series and parallel combinations of inductor **Expt. 10:** Measuring voltage across different step down transformer **Expt. 11:** Study of different types circuit breaker **Expt. 12:** Turning light/lamp/led ON and OFF using relay **Expt. 13:** Implementation of switch in the electrical circuit	
Pedagogy	
Lab experiments	
Course Outcome	
On completion of the course, students will be able to perform the experiments with a given circuit diagram and maintain the lab work book. Students will be also able to plot the results on the graph and analyse it.	