

Regulation GRBT-20	Godavari Institute of Engineering & Technology (Autonomous)	I B.Tech			
Course Code	<b>Electrical Engineering Workshop</b>				
Teaching	Total contact hours - 30	L	T	P	C
Prerequisite(s): Basics of Electricity		0	0	3	1.5

**Course Objective:**

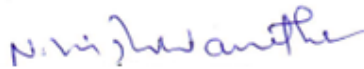
1. To demonstrate the usage of measuring equipment.
2. To train the students in setting up simple wiring circuits.
3. To impart methods in electrical machine wiring.
4. To identify the types of different suitable devices for conducting of experiment.
5. To understand Kirchhoff's laws.

**Course Outcomes:**

On Completion of the course, the students will be able to-	
C01:	Explain the limitations, tolerances, safety aspects of electrical systems & wiring.
C02:	Select wires/cables and other accessories used in different types of wiring.
C03:	Make simple lighting and power circuits.
C04:	Measure current, voltage and power in a circuit.
C05:	Make disassembling and assembling of PC.



University Nominee  
(Dr.Y.Srinivasa Kishore Babu)



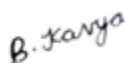
Subject Expert  
(Dr.N.Viswanathan)



Subject Expert  
(Dr.B.Ravi Kumar)



Internal Member  
(Mr.T.Amar Kiran)



Internal Member  
(Mrs B Kavya Santhoshi)



Internal Member  
(Mr V Suresh)



Chairman-BOS  
(Dr.D.Ravi Kishore)

## List of Experiments:

1. Study of various electrical tools and symbols.
2. Identify different types of cables/wires and switches, fuses & fuse carriers, MCB and ELCB, MCCB with ratings and usage.
3. Identification of types of resistors and capacitors.
4. Wiring of light/fan circuit using two way/ three way control (stair case wiring)
5. Go-down wiring/Tunnel wiring
6. Wiring of power distribution arrangement using single phase MCB distribution board with ELCB, main switch and energy.
7. Measurement of voltage, current, resistance in DC circuit.
8. Measurement of voltage, calculate the power factor of the circuit.
9. Wiring of backup power supply including inverter, battery and load for domestic.
10. Types of earthing, physical implementation.
11. Identification of terminals of different semiconductor devices.
12. Identification of the peripherals of a computer. To prepare a report containing the block diagram of the CPU along with the configuration of each peripheral and its functions. Description of various I/O devices, power rating of computers.
13. A practice on disassembling the components of a PC and Assembling them to back to working condition.
14. Hardware trouble shooting (Demonstration): Identification of a problem and fixing a defective PC (improper assembly of peripherals).
15. Software troubleshooting (Demonstration): Identification of a problem and fixing the PC for any software issues.

## CO-PO Mapping:

( 1: Slight [Low]; 2: Moderate[Medium]; 3: Substantial[High], '-' : No Correlation)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	3	2	-	-	-	-	-	-	-	-	
CO2	-	-	2	-	-	-	-	-	-	-	-	
CO3	1	-	-	-	-	-	-	-	-	-	3	
CO4	-	-	-	-	-	-	-	-	2	-	-	
CO5	-	3	-	-	-	-	-	-	2	-	-	



University Nominee  
(Dr.Y.Srinivasa Kishore Babu)



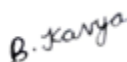
Subject Expert  
(Dr.N.Viswanathan)



Subject Expert  
(Dr.B.Ravi Kumar)



Internal Member  
(Mr.T.Amar Kiran)



Internal Member  
(Mrs B Kavya Santhoshi)



Internal Member  
(Mr V Suresh)



Chairman-BOS  
(Dr.D.Ravi Kishore)