

Course No: 3 Basic Electricity Principles and Transistor Applications

Objective :

- 1) Describe the composition, matter, and the structure of the atom
- 2) Describe the principles of electricity and the theory of current flow
- 3) Describe the basic type of electrical circuit and their characteristics
- 4) Describe electromagnetism
- 5) To study the input and output characteristics NPN transistor CE mode and determine transistor parameter

Outcomes:

- 1) Creating new knowledge
- 2) Developing physical and manual skill
- 3) Developing feeling and emotion
- 4) Communication effectively
- 5) Acquire subjective knowledge

Opportunity:

- > Lights, water heatings and coolings
- > T.V. and media devices
- > Smaller mechanical sensitivity
- > Low operating voltage
- > Extremely long life
- > Fast switching
- > No power consumption
- > Better efficiency circuit and lower cost and smaller in size
- > Used to develop single integrating circuit.

Fees :

Unpaid Courses.

Certificate details :

Certificate courses will be given to the by the Department of Physics, TTWRDC, W, Medak

Contents :

Unit I : Basic Electricity Principles
resistance, inductance, capacitor, colour code, resistance, voltage, current, power, ohms law, kirchoffs law, junction diode transistor

Unit II : Understanding Electronic Circuit

AC and DC course, rules and analysis, DC source , electronic circuit, current voltage drops across the DC circuit elements, rectifier(half wave full wave and bridge) voltage regulator using zener diode.

Unit III : Transistor Application

CE amplifier, its analysis and performance, CB amplifier, its analysis and performance, Hartley oscillator, Colpits oscillator, and their performance

Book Recommended:

1. A Text Book In Electrical Technology, B L Thereja, S Chand, and CO.
2. Electrical Circuit Handbook Of Design And Application J T Tech, Schenk, 2008
Springer
3. Electrical Circuit Handbook Of Design And Application J T Tech, Schenk, 2008
Springer


Principal
T.T.W. Residential Degree College (W)
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