### **Course Number and Name**

BEE6L2 & Measurement and Instrumentation Laboratory

### **Credits and Contact Hours**

2 & 45

### **Course Coordinator's Name**

Mr.Vijayaragavan

## **Text Books and References**

#### **Text Books:**

Lab Manual

# **Course Description**

To acquire skills on using different measuring devices and mathematical modeling of machines and use of control system components.

Prerequisites	Co-requisites					
Nil	Measurement and Instrumentation					
required, elective, or selected elective (as per Table 5-1)						
Required						

## **Course Outcomes (COs)**

CO1: To Understand the operation of DC and AC bridges

CO2: To Calibrate the different types of meters and special type of instruments

Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	С	d	e	f	gg	h	i	j	k	L
CO1	Н	Н	L	L	Н	M	M	L	L	L	L	L
CO2	Н	Н	L	L	M	M	M	L	L	L	L	L

# **List of Topics Covered**

## LIST OF EXPERIMENT:

- 1. Study of temperature measurement Transducer (thermocouple).
- 2. Study of displacement and pressure transducer (LVDT).
- 3. AC Bridges.
- 4. DC bridges.
- 5. Instrumentation amplifiers.
- 6. Linerization using microprocessors.
- 7. A/D and D/A converters.
- 8. Hystersis loss measure using CRO.
- 9. Torque and angle measurement.
- 10 .Calibration of single phase energy meter.
- 11. Calibration of three phase energy meter.
- 12. Measurement of three phase power and power factor