#### **Course Number and Name**

BEC3L1 - ELECTRONIC DEVICES AND CIRCUITS LAB

#### **Credits and Contact Hours**

2 & 45

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

Ms K.Subbulakshmi

### **Text Books and References**

Lab Manual

## **Course Description**

- To be exposed to the characteristics of basic electronic devices
- Model the electronic circuits using tools such as PSPICE

Prerequisites	Co-requisites
Basic Electrical & Electronics Engineering Lab	Nil

required, elective, or selected elective (as per Table 5-1)

required

# **Course Outcomes (COs)**

CO1: Learn the characteristics of basic electronic devices.

CO2: Learn the Characteristics of UJT

CO3: Learn the Characteristics of FET

CO4: Learn about Power amplifiers.

CO5 :Learn about Differential amplifiers

CO6 :To understand the concepts of simulation by using Spice tool

# Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	а	b	С	d	е	f	g	h	i	j	k
CO1	Н			Н		M			M	M	
CO2	M		Н	Н			М				
CO3	M		Н	Н			M		M	М	
CO4	M			Н	Н						
CO5	M	L		Н							
CO6		Н	Н	Н		Н			M		

# **List of Topics Covered**

# **LIST OF EXPERIMENTS**

- 1. CE Transistor Characteristics
- 2. UJT Characteristics
- 3. FET Characteristics
- 4. SCR Characteristics
- 5. Power Supplies
- 6. Frequency Response of CE, CB and CC Amplifiers with self bias, fixed bias and Collector to Base feedback bias
- 7. Source Follower with gate resistance, Bootstrapped.
- 8. Class A and Class B Power amplifiers
- 9. Differential Amplifiers, CMRR measurements
- 10. Spice Simulation of Common Emitter and Common Source amplifiers