**Course Number and Name**
BEC4L1 - ELECTRONIC CIRCUIT DESIGN LAB

**Credits and Contact Hours**
2 and 45

**Course Coordinator’s Name**
Ms K.Subbulakshmi

**Text Books and References**
Lab Manual

**Course Description**
- To gain hands on experience in designing electronic circuits.
- To learn simulation software used in circuit design.
- To learn the fundamental principles of amplifier, Oscillator and multivibrator circuits
- Construct waveform generation circuits

**Prerequisites**
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<tr>
<td>BEC3L1-Electronics Devices and circuit Lab</td>
<td>BEC402-Electronics Circuits required, elective, or selected elective (as per Table 5-1) required</td>
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**Course Outcomes (COs)**
CO1: Analyse the characteristics of amplifiers.
CO2: Analyse the characteristics of Oscillators.
CO3: Analyse the characteristics of Multivibrators.
CO4: Analyse the characteristics of tuned amplifiers.
CO5: Analyse the frequency response of amplifiers using pSpice.
CO6: Model the design of electronic circuits using PSpice.

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

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**List of Topics Covered**

**LIST OF EXPERIMENTS**
1. Feedback amplifier
2. Transistor phase shift oscillator
3. Class A single tuned amplifier
4. LC Oscillators
5. Collector coupled and Emitter coupled Astable multivibrator
6. Wein bridge oscillator
7. Schmitt Trigger
8. Emitter coupled bistable multivibrator
9. Monostable multivibrator
10. Class C tuned amplifier

**SIMULATION USING SPICE:**
12. DC response of CS amplifier
14. Transfer Characteristics of Class B Power Amplifier