

Course Number and Name												
BEE4L2&Linear & Digital Integrated Circuits Laboratory												
Credits and Contact Hours												
2 & 45												
Course Coordinator's Name												
Dr.V.Jayalakshmi												
Text Books and References												
Text Books: Lab Manual												
Course Description												
<ul style="list-style-type: none"> Analyze and design various applications of Op-Amp Design and construct waveform generation circuits Design timer and analog and digital circuits using op amps. To design combinational logic circuits using digital IC's 												
Prerequisites						Co-requisites						
Nil						Linear Integrated Circuits						
required, elective, or selected elective (as per Table 5-1)												
Required												
Course Outcomes (COs)												
CO1: Ability to design the techniques of DC power supply suitable to electronic circuits												
CO2: Analyze the performance characteristics of linear ICs.												
CO3: Design amplifier, oscillator, signal conditioning circuits, combinational circuits and Sequential circuits for given requirement												
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
CO1	H	H			H	H		H	M		L	
CO2			H		H		L		L			M
CO3	H	H	H	M	H		L			L		
List of Topics Covered												
LIST OF EXPERIMENTS:												
<ol style="list-style-type: none"> Inverting and non inverting amplifier. Differentiator and Integrator. Monostablemultivibrator. Astablemultivibrator. Adder and subtractor. D/A and A/D converter. Schmitt trigger. Sine, rectangular and triangular wave generator. Multiplexer and Demultiplexer using logic gates Design and Implementation of code converters using logic gates. Simulation of IC circuits using PSPICE/SIMULINK 												

12. Study of VCO and PLL ICs:

13. Voltage to frequency characteristics of NE/ SE 566 IC.

14. Frequency multiplication using NE/SE 565 PLL IC.