

<b>ELECTRIC CIRCUITS LABORATORY</b>		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>15EE103L</b>	Total Contact hours – 30	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>
	Co-requisite				
	15EE103- Analysis of Electric circuits				
<b>PURPOSE</b>					
This laboratory course will give a thorough knowledge about the basics of circuit analysis.					
<b>INSTRUCTIONAL OBJECTIVES</b>					
1.	Understand and gain knowledge about circuit laws and theorems				
2.	Gain knowledge about time domain analysis of circuit transients.				
3.	Understand the concept of resonance in series and parallel circuits				
4.	Learn how to use the PSPICE software for simulating circuits.				

### LIST OF EXPERIMENTS:

1. Verification of Kirchhoff's laws
2. Verification of Thevenin's and Norton's Theorem
3. Verification of Superposition and Reciprocity theorem
4. Verification of Maximum Power Transfer theorem
5. Time domain analysis of RL, RC transient circuits.
6. Series resonance circuit
7. Parallel resonance circuit

Note : All the above experiments can be realized in simulation and hardware environment

### REFERENCES

1. Department Lab Manual
2. Sudhakar.A and Shyam Mohan.S.P, "Circuits and Networks Analysis and Synthesis", Fourth edition, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2010.
3. Muhammed H Rashid, "SPICE for Circuits and Electronics using PSPICE", PHI, 2nd Edition, 2011.

<b>15EE103L -ELECTRIC CIRCUITS LABORATORY</b>												
<b>Course designed by</b>		<b>Department of Electrical and Electronics Engineering</b>										
1.	Student Outcome	a	b	c	d	e	f	g	h	i	j	k
		x	x			x						
2.	Mapping of instructional objectives with student outcome	1-3	1-3			1-3						1-4
3.	Category	General (G)	Basic Sciences (B)		Engineering Sciences and Technical Arts (E)				Professional Subjects (P)			
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4.	Broad Area	Electrical Machines	Circuits & Systems		Electronics		Power Systems		Intelligent Systems			
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5.	Approval											