

COURSE CODE: <b>1151EE301</b>	COURSE TITLE: <b>CIRCUIT ANALYSIS LAB</b>	L	T	P	C
		<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>
<b>COURSE CATEGORY:</b> Program Core					
<b>PREAMBLE :</b> This course aims to make the students verify network laws and theorems practically and also helps to understand circuits with three phase, resonance and transients					
<b>PREREQUISITE COURSES:</b> Basic Electrical & Electronics Engineering Lab					
<b>RELATED COURSES:</b> Control Systems Lab					
<b>COURSE EDUCATIONAL OBJECTIVES :</b> The objectives of the course are to make the students, <ul style="list-style-type: none"> <li>• Provide the verification of basic network laws and theorems</li> <li>• Analyze circuits involving three phase, resonance and transients.</li> <li>• Understand the importance of two port network parameters.</li> </ul>					
<b>COURSE OUTCOMES :</b> Upon the successful completion of the course, students will be able to:					
<b>CO Nos.</b>	<b>Course Outcomes</b>	<b>Knowledge Level (Based on revised Bloom's Taxonomy)</b>			
CO1	Verify network laws and theorems for DC and AC circuits	S2			
CO2	Calculate the two port network parameter	S2			
CO3	Demonstrate the use of CRO for measurement	S2			
CO4	Calculate the frequency response of RLC circuits	S3			
CO5	Calculate the time response of RLC circuits during transients	S3			
<b>LIST OF EXPERIMENTS:</b>					
<ol style="list-style-type: none"> <li>1. Verification of Kirchhoff's voltage and Current Laws.</li> <li>2. Verification of Network theorems( Superposition, Thevenin's and Maximum power transfer theorems)</li> <li>3. Measurement of frequency and phase difference using CRO.</li> <li>4. Frequency response of series RLC circuit.</li> <li>5. Measurement of form factor and peak factor for different waveforms.</li> <li>6. Measurement of two port network parameters.</li> <li>7. Power and power factor measurement by two wattmeter method.</li> <li>8. Measurement of Energy using single phase energy meter.</li> <li>9. Transient response of series RL and RC circuit.</li> <li>10. Simulation of low pass and high pass passive filters.</li> </ol>					