

## Circuit Theory Lab

Circuit theory is one of the basic courses in Electrical Engineering. The main objective of this course is to provide knowledge of the methods of mathematical modelling of the electric elements and circuits as well as to develop abilities and skills for practical applications.

The laboratory experiments in circuit theory course are dedicated for practical understanding of circuit theory concepts. Linking of the circuit theory with practice, it is very important to motivate the students for learning theory concepts and to encourage them to use this theory knowledge in practical activity. Thus the relation of theoretical circuit elements, circuit components and theoretical laws to the understanding of circuit functioning is the main objective of the Circuit theory lab.



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### **Equipment Details**

<b><i>Hardware</i></b>	<b><i>Qty</i></b>
Digital Storage Oscilloscope TDS-2002	05
Multimeter (digital)	05
Auto-Transformer (single phase)	04
Wattmeter (LPF 0.5)	04
Rheostat (0-320 $\Omega$ )	02
Rheostat (0-140 $\Omega$ )	02

Rheostat (0-110 $\Omega$ )	02
Tellegen's Theorem trainer kit	02
Reciprocity Theorem trainer kit	02
Maximum power transfer Theorem trainer kit	02
Superposition Theorem trainer kit	02
Thevenin's Theorem trainer kit	02
Norton's Theorem trainer kit	02
Regulated power supply 30V	01
Dual trace Oscilloscope, 60 MHz	03
Function generator	05
D.C Power supply: (0-30V), 2A, +12V- $\pm$ 15V, 1A, 5A	05
Lab standard resistance (Decade resistance box)-3 Dials, 10 steps per dial, total steps-30, 1.1-1110 $\Omega$ 2.10-11100 $\Omega$	05
D.C power supply: 0-30V, 3A/5A	05
Electrical Drilling Machine	01