

Course Code:	12110101
Title :	Electrical Circuits I
Credit hours:	(3,0,3) 3 C. H.
Prerequisite :	General Physics II
Course Description :	<p>This course will include the following topics: Basics of DC circuit elements, (charge, current, voltage, power, voltages sources and current sources) . Circuit Analysis (Series, Parallel, and Compound), Circuits Laws (Ohms, Kirchhoff KCL, KVL, Divider Rules VDR CDR, and source Transformation), Network Analysis (Mesh, Nodal, Bridges Networks, and Δ-Y connection and conversion), Network Theorems (Superposition, Thevenin, Norton, and Maximum Power Transfer), Capacitors and Inductors Circuits and their properties, RC and RL circuits (zero state, zero input and complete response) , Series and Parallel RLC circuits and their response.</p>
Books	Engineering Circuit Analysis , 6 th edition, W. Hayt , J. Kemmerly and S. Durbin, Mc Graw Hill.