

Course Code:	12110203
Title:	Electrical Circuits II
Credit hours:	(3,9,3) 3 C.H.
Prerequisite :	Electrical Circuits I
Course Description:	<p>This course will include the following topics: Basics of ac waveforms and circuit elements, principles of phasors and its diagrams, Circuit Analysis (Series, Parallel, and Compound), Network Analysis (Mesh, Nodal, Bridges Networks, and Δ-Y connection and conversion), Network Theorems (Superposition, Thevenin, Norton, and Maximum Power Transfer), Power types(real, reactive, and Apparent), Power triangle and Power Factor Correction, Resonance Circuits and properties, Polyphase System properties and Analysis, Magnetically coupled Network and Transformers, and using Laplace Transformation to solve the A.C Electrical Circuits.</p>
Books	<ol style="list-style-type: none"> 1. Introductory Circuit Analysis, 10th edition, Robert L. Boylestad, Prentice Hall. (Ch13-Ch22) 2. Basic Engineering Circuit Analysis, 6th edition, Irwin & Wu, Wiley. (Ch13-Ch14)