

Course Syllabus

Course Code and Name	EE 26323 –Electric Circuits -2
Credit and contact hours	3 (2, 1, 1) (Lecture, Tutorial, Lab)
Required or Elective	Required
Level / Year	Level (5) / Year (3)
Course Prerequisite	EE 26222 Electric Circuits-1
Textbook	J. Nilsson and S. Riedel, Electric Circuits, Prentice Hall, 2010.
Course Description	This course covers the following topics: Three phase circuits - Magnetically-coupled circuits – Transformer- Computer-aided circuit analysis – Frequency Response - Resonant circuits: series and parallel resonance - Circuit analysis in the S-domain (i.e., using Laplace transform) - First- and Second-Order Circuits: Natural and Forced Response - Two-port networks.
Brief List of Topics to be Covered	<ol style="list-style-type: none">1- Three phase circuits.2- Magnetically coupled circuits- Transformers.3- Computer-aided circuit analysis.4- Resonant circuits: series and parallel resonance.5- Filters (Low, High and Band pass filters), Band reject filters.6- First- and Second-Order Circuits.7- Laplace transform applications in Electric Circuits.8- Two port networks.
Course is prerequisite for	<ul style="list-style-type: none">• EE26361 Electrical Machines – 1• EE26451 Electrical Power Systems – 1