

Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı
Açık Ders Malzemeleri

Ders izlenme Formu

Dersin Kodu ve İsmi	EEE201 Circuit Analysis II
Dersin Sorumlusu	Assoc. Prof. Dr. Hakkı Alparslan ILGIN Dr. Deniz KARAÇOR
Dersin Düzeyi	Undergraduate
Dersin Kredisi	4
Dersin Türü	Theoretical
Dersin İçeriği	Sinusoidal steady-state analysis, sinusoidal source, sinusoidal response, the phasor, passive circuit elements in the frequency domain, Kirchhoff's Laws in the frequency domain, Impedance, series, parallel and Delta-Y simplifications, node-voltage method in AC circuit analysis, mesh-current in AC circuit analysis, sinusoidal steady-state power calculations, instantaneous power in AC, average power, reactive power, complex power, apparent power, maximum power transfer, balanced three-phase circuits, analysis of Y-Y circuits, analysis of Y-Delta circuits, Laplace Transform, Fourier Transform, frequency selective circuits, active filter circuits.
Dersin Amacı	Building knowledge on AC circuit analyzing, methods on circuit analysis. Analysis, design and modelling of circuits consist of circuit elements such as AC voltage sources, resistor, inductor and capacitor. Using source transformations, Thevenin and Norton equivalent circuits. Using mesh-current, node-voltage methods and superposition principle on AC circuit analysis. Power and maximum power transfer, and energy concepts. Learning, instantaneous power in AC circuits, average power, reactive power, complex power, apparent power, maximum average power transfer. Using passive sign convention on power and voltage-current related equations.
Dersin Süresi	4 hours/week
Eğitim Dili	English
Ön Koşul	-
Önerilen Kaynaklar	Text Book: Electric Circuits by James W. Nilsson, Susan Riedel
Dersin Kredisi (AKTS)	6
Laboratuvar	-
Diğer-1	-