

Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı
Açık Ders Malzemeleri

Ders İzlençe Formu

Dersin Kodu ve İsmi	ELE321 Linear System Analysis
Dersin Sorumlusu	Associate Professor Hakkı Alparslan İLGIN Assistant Professor Aykut KALAYCIOĞLU
Dersin Düzeyi	Undergraduate
Dersin Kredisi	3
Dersin Türü	Theoretical
Dersin İçeriği	Signals, systems, signal energy and power, periodic signals, even and odd signals, exponential signals, sinusoidal signals, continuous-time signals, discrete-time signals, unit impulse function, unit step function, continuous-time systems, discrete-time systems, system properties, time invariance, linearity, linear time-invariant systems, convolution, differential and difference equation representation of causal linear time-invariant systems, properties of linear time-invariant systems, Fourier series representation of periodic signals, Fourier series and linear time-invariant systems, continuous-time and discrete-time filters, continuous-time and discrete-time Fourier transform, sampling.
Dersin Amacı	Providing detailed knowledge on linear time-invariant systems, system properties, continuous-time and discrete-time signals, Fourier series of periodic continuous-time and discrete-time signals, Fourier transform of continuous-time and discrete-time signals, filters and sampling theorem.
Dersin Süresi	3 hours/week
Eğitim Dili	English
Ön Koşul	
Önerilen Kaynaklar	Text Book: Signals and Systems by Alan V. Oppenheim, Alan S. Willsky with S. Hamid Nawab, Prentice Hall, Second Edition, 1997.
Laboratuvar	-