

## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF316	Signals and Systems	5	3	0	0	3	4

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	In this class we aim at introduce the study of linear digital and continuous systems. Most of the examples used in the part "continuous system" will be electrical circuits
Content	Linear invariant digital and continuous systems
References	Classes' summary, former examinations'subjects and exercises <a href="http://kikencere.gsu.edu.tr/course/view.php?id=134">http://kikencere.gsu.edu.tr/course/view.php?id=134</a> Hwei Hsu :Signal and Systems, Second Edition Edward W. Kamen, Bonnie S. Heck: Fundamentals Of Signals And Systems Using the Web and Matlab, Second Edition Walter Appel :Mathématiques pour la physique et les physiciens Taan S. ElAli, Mohammad A. Karim :Continuous Signals And Systems With Matlab Paul A. Lynn, Wolfgang Fuerst :Introductory Digital Signal Processing With Computer Applications

## Theory Topics

Week	Weekly Contents
1	Introduction
2	Linear, invariant continuous systems.
3	Linear, invariant digital systems.
4	Impulsional response of a digital system
5	convolution of sequences
6	Impulsional response of a continuous system
7	convolution of continuous signals.
8	Midterm examination
9	Fourier's Analysis
10	Fourier's Analysis
11	Fourier's Analysis
12	FFT
13	FFT
14	FFT