LINEAR ANALYSIS SYSTEM

Course Name	Course ID	Prerequisite
LINEAR ANALYSIS SYSTEM	*EGP 412*	*EGP 321 / MATH 203*

Course Description

Study of analog systems, Laplace transforms, Fourier transforms, system responses (impulse, amplitude, and phase) filter analyses, emphasis on geophysical applications, and computer use.

Course Objectives

1. Learn the Fourier Transform
2. Time series analysis
3. Signal processing
4. Sampling theory.

General References for the Course: (Books/Journals…*etc*.)

Students in this course can read from:
> *The Fast Fourier Transform and its Applications,* by Brigham, E., 1988. Prentice Hall.

List of URLs for this Course

- www.lems.brown.edu/vision/courses/EN157_2004/index.html

- www.answers.com/topic/linear-system-analysis

Course Outcome

1. Student knows the principles of data processing and the advantage of transformation of the data to frequency and wave number domain where data processing become easier and faster.
2. Student can gain this knowledge which will help in his final graduation project.