

Advanced Digital Signal Processing

Course Code: EE6101

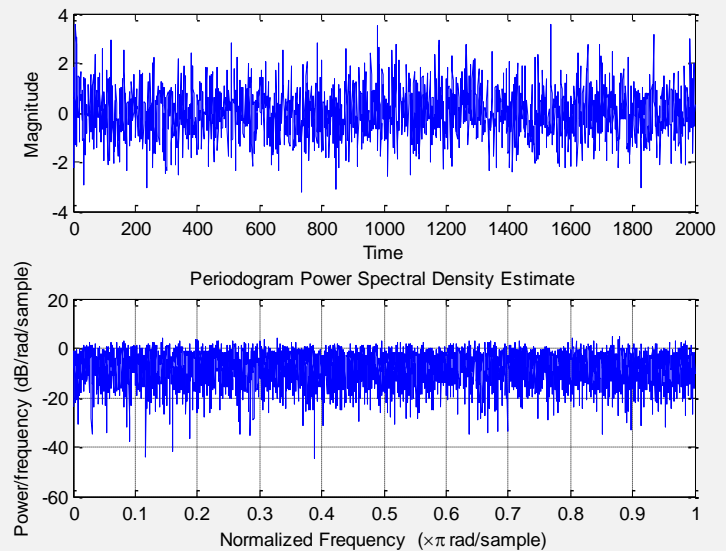
Credit Hours: 3

Pre-requisite:

Undergraduate course in Signal Processing.

Target Audience

Students wishing to pursue research in the area of signal processing.



White Gaussian Noise and its Periodogram

Synopsis

The course assumes a basic knowledge of undergraduate-level Digital Signal Processing and Probability. Starting from a review of these basic concepts, it covers the topics including noise modeling, multi-rate signal processing, power spectrum estimation and optimal linear filtering.

Instructor

The course will be taught by Dr. S. M. Monir (monir@pafkiet.edu.pk). Dr. Monir holds a PhD degree with specialization in Signal Processing from Nanyang Technological University, Singapore. His research interests include image processing and pattern recognition.

Recommended Text

- Proakis Manolakis, *Digital Signal Processing*
- S. V. Vaseghi, *Advanced Digital Signal Processing and Noise Reduction* third ed.: Wiley, 2006.
- Simon Haykin, *Adaptive Filter Theory* 4th ed.
- A. Papoulis and S.U. Pillai, *Probability, Random Variables and Stochastic Processes* Fourth Edition, 2002