Name of the subject: **Signal processing II**	*NEPTUN code:* KMXJK6ABNE	**Weekly hours:** 1 2 lec+ 2 gs+ 0 lab	**Credit:** 3 **Req:** Examination
Subject leader: **Dr. József Neszveda**	**docent**	**Prerequsites:**	

Description of the subject:

Parameters of stochastic signals in amplitude domain (amplitude distribution and density functions) Typical signals. Parameters in time domain (auto- and cross correlation functions), methods of measurement/calculation. Parameters in frequency domain (auto- and cross- power spectra) Rule Wiener-Hinchin. Calculation of correlation functions by utilization of FFT.

Methods of image processing: thresholding, filtering in space domain, filtering in frequency domain. Measuring distances, area, circle diameter in gray-scale and in binary images. Calibration of camera. Pattern and character recognition. Bar-code reading.

Literature:

S. V. Narasimham, S. Veena> Signal processing> principles and implementation, Google books

Rafael C. Gonzales, Richard E. Woods. Digital Image Processing, Google books ISBN 0-13-168728-x

Desmond J. Higham, Nicholas J. Higham: Matlab Guide, ISBN-10: 0-89871-578-4, Google books