Course announcement
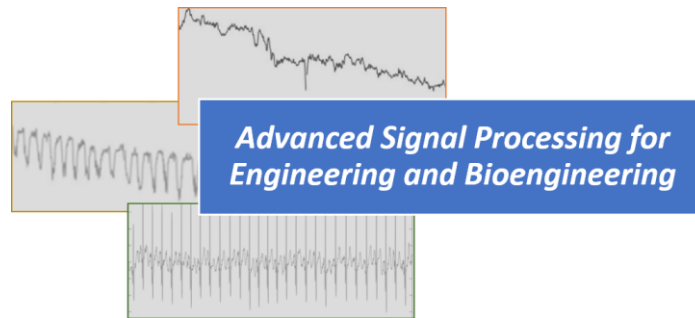# Data analysis for engineering
"Advanced Signal Processing for Engineering and Bioengineering"
Dr. Daniela Cardone

Hours 8 - 1 cfu
Classes will be in English
Compulsory attendance

Final essay based on a set of questions about the teaching program. Final essay is compulsory to obtain cfu

Advanced Signal Processing for Engineering and Bioengineering
The module aims to allow the student to develop the ability to analyze the characteristics of a signal in the temporal or spatial domain, of engineering and biomedical interest, in relation to clinical/technological/scientific use. In particular, the student will be able to choose the best methodological approach for the analysis of a wide range of signals, developing the critical ability to identify and apply, among all the methods that make up the body of the teaching, the one that results to be from time to time the most appropriate according to the type of signal being analyzed and according to the purpose of the analysis itself.
The program includes:
1. Techniques for recording biomedical signals
2. Biomedical signals
3. Biomedical signal processing techniques
4. Dimension reduction
5. Classification Methods
The course will deal with example of scripts in Matlab for each of the program topics.

OBJECTIVES
At the end of the course, students will be able to critically identify the more appropriate and suitable method for their application, according to the type of signal being analyzed. In addition, they will be able to develop a Matlab script to analyze the data, by the use of specific toolboxes.

✉ Register by   sending email to:
tea.taraborelli@unich.it & d.cardone@unich.it (in cc)
For those not at University of Chieti-Pescara it is possible to follow the short course online: specify request when you register.

TIMETABLE			
MONDAY			
TUESDAY			
WEDNESDAY	5 July 2023	12.00-14.00	15.00-17.00
THURSDAY	6 July 2023	14.00-18.00	
FRIDAY			