Statistical and Computational Methods for Engineers (part II)

5-11-13-15, Dicembre, University of Rome "Niccolo' Cusano"

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Course Description[1]**:** The course aims to provide essential statistical and computational tools to research in Engineering and in Science. The emphasis is on application of the methods considered.
Prerequisite(s): None.
Credit Hours: 8

Text(s): No single book is required. Readings will be assigned on each class.
Course Objectives:
At the completion of this course, students will be able to:

1. Defining a research project and the types of statistical analyses needed
2. Designing statistical experiments and simulation studies
3. Performing the statistical analysis of data
4. Writing efficient algorithms on Octave (on the first part R)
5. Interpreting the statistical results obtained
6. Analysing the robustness and the sensitivity of the results obtained

Tentative Course Outline:
The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Content
5 December 15-17	• Octave Basics
11 December 9-11	• Octave Programming I
13 December 9-11	• Octave Programming II
15 December 9-11	• Applications

[1]This syllabus template was created by: Brian R. Hall