

Statistical analysis and document mining



Level
Baccalaureate
+4



Component
UFR IM2AG
(informatique,
mathématiques
et
mathématiques
appliquées)



Semester
Printemps

- > **Teaching language(s):** English
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** GBX8AM14

Presentation

Objectives

The aim of this course is to present the statistical approaches for analysing multivariate data. The information age has resulted in masses of multivariate data in many different field: finance, marketing, economy, biology, environmental sciences,... The theoretical and practical aspects of multivariate data analysis are given equal importance. This balance is achieved through practicals involving actual data analysis using the R software.

Course parts

Lectures	Lectures (CM)	16,5h
Practical work	Practical work (TP)	25,5h

Recommended prerequisites

Elementary notions in probability theory (probability distribution, joint probability density function for random vectors, conditional distribution, expectation, variance, covariance, Gaussian distribution)

Elementary notions in mathematical statistics (estimator, confidence interval, statistical tests).

As a bonus: simple linear regression, linear algebra (matrix reductions), elementary notions in Rstudio and the R software.

Useful info

Contacts

Program director

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Campus

➤ Grenoble - University campus