

# Probabilités et statistiques

## Lecturers

Jennifer ALONSO GARCIA (Coordinator) and Thomas VERDEBOUT

## Course mnemonic

MATH-F315

## ECTS credits

5 credits

## Language(s) of instruction

French

## Course period

First term

## Course content

Part 1 : Probability Introduction to the basics of probability measure, random variables, independance, correlation. Part 2 : Statistics Introduction to estimators, confidence intervals and tests of hypothesis, for a proportion, a mean, a variance, the comparison of two proportions or means. Chi-square tests of adjustment, homogeneity and independance. Linear regression. ANOVA with one or two factors.

## Objectives (and/or specific learning outcomes)

Goal : to teach the students the foundations of the statistical methods that they will use to analyse data.

## Pre-requisites and co-requisites

### Pre-requisites courses

MATH-F112 | Mathématiques 1 | 10 crédits

### Course having this one as co-requisit

INFO-F303 | Réseaux, information et communications | 5 crédits

## Teaching method and learning activities

Teaching Method : ex-cathedra courses with lots of exampples presented in the domains of the students. Exercices sessions where the students analyse problems.

## Contribution to the teaching profile

The course is taught in French, so please see the french version for details or send an email to tverdebo@ulb.ac.be if you need more details in English.

## References, bibliography and recommended reading

Biblio : lecture notes available for students.

"Eléments de Statistique". C. Dehon , J.-J. Droesebeke , C. Vermandele, édité par l'Université Libre de Bruxelles et Ellipses.

## Other information

### Contact(s)

Thomas Verdebout. Email: tverdebo@ulb.ac.be

## Evaluation method(s)

Other

### Evaluation method(s) (additional information)

Assessment : written exam in January in two parts: one more theoretical, one with problems to solve

## Programmes

### Programmes proposing this course at the faculty of Sciences

BA-INFO | Bachelor in Computer science | unit 2