

APPLIED STATISTICS

LEVEL: MASTER 1

PERIOD: SEMESTER 1

LANGUAGE: EN

ECTS: 3

TEACHER/COORDINATOR: PIERRE VANDENDRIESSCHE



2019-2020

1-Main objectives

To take into account the multiple backgrounds, this course is designed to improve basic and advanced knowledge of statistics and probabilities

2-Skills developed

Being able to master all relevant statistical tools related to statistical quality control, process control and R&D in Food Science.

3-General content

Tutorial class essentially, interactive lecture, problems, real case studies

- › Basic Statistics: tables, charts
- › Numerical descriptive measures
- › Basic probabilities (events, Bayes, conditional)
- › Discrete distributions (Binomial, Poisson, Hypergeometric...)
- › Continuous Distributions (Normal, Fisher, Student...)
- › Sampling
- › Confidence Intervals (mean, proportion...)
- › Hypothesis Testing
- › Single and Multiple Sample tests (parametric and non parametric)
- › ANOVA (one way, two ways, randomized block design)
- › Post Hoc Tests (Tukey...)
- › PCA, CA, HAC, MCA

4- Evaluation

Presentation of case study analyze in groups of 3 or 4 students.

- › 50% written presentation (Power point)
- › 50% oral presentation