

Mathematics

Statistics

IDENTIFICATION

CODE : IF-4-S1-EC-ST
ECTS : 2.0

HOURS

Lectures : 12.0 h
Seminars : 12.0 h
Laboratory : 0.0 h
Project : 0.0 h
Teacher-student
contact : 24.0 h
Personal work : 25.0 h
Total : 49.0 h

ASSESSMENT METHOD

Exam [1h30, all documents
authorized, calculator needed].

TEACHING AIDS

Lecture notes are available.

TEACHING LANGUAGE

French

CONTACT

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AIMS

The aim is to give the bases of statistics for an engineer, in particular on statistical estimation and hypothesis testing.

At the end of the lecture you should be able :

- to determine whether a hypothesis is plausible and evaluate the associated risk (p-value),
- to take a decision relative to what has been observed,
- to test the goodness of fit of a model,
- to establish an eventual link between two characteristics.

CONTENT

1. Descriptive statistics
2. Theory of estimation : punctual estimation and confidence intervals
3. Hypothesis testing
4. Chi-square tests
5. Introduction to regression

BIBLIOGRAPHY

Saporta G. [1990] Probabilités, analyse des données et statistique" Paris : Ed; Technip

PRE-REQUISITE

IF-3-PR