Applied Statistics to Management

ECTS : 3

Volume horaire : 27

Description du contenu de l'enseignement :

Course Overview

Introduction to statistical tools used to summarize and analyze a set of data, to the fundamental concepts of probability and the laws of probability. Presentation of statistical inference concepts: sampling, parameter estimation and hypothesis testing. Introduction to simple linear regression.

Course Chronology

A . Probabilities

I. Basic concepts
1. Random experience and events
2. Definition of a probability
3. Conditional probabilities
4. Bayes formula
5. Independence
6. Combinations and arrangements

II. Random variables
1. Discrete random variables
2. Continuous random variables
3. Approximations

III. Two-dimensional random variables
1. Independence
2. Covariance
3. Properties of expected value and variance

B. Statistical inference

1. Sampling theory
2. Statistical estimation
a) Point estimation
b) Confidence interval estimation
3. Hypothesis testing

Compétence à acquérir :

Gain various basic concepts and strategic tools used in the Science of Management. Develop, through a variety of applications based principally in the domain of management, the capacity to interpret and analyze quantitative data.

Mode de contrôle des connaissances :

- Midterm 50%
- Final Exam 50%