

# Introductory statistic course with XLSTAT Software

**Goals : Learning statistical techniques as well as multivariate analysis methods and their fields of application, Effective usage of XLSTAT.**

This training goes through the data analysis methods which are most commonly used in industry today. The course is organized in a way that allows participants to study the descriptive and explanatory data analysis, modeling, and hypothesis testing methods, by understanding the objectives, the implementation and the interpretation of each method.

Many examples are presented and explained to enable participants to become familiar with the practice of data analysis with XLSTAT.

This three-day course provides a full training on standard statistics. It is divided as follow:

## **DAY 1: Getting started with XLSTAT and Describing data**

- Introduction to XLSTAT
- Preparing and managing data: coding data
- Describing data: Qualitative and quantitative data, Descriptive statistics, and Contingency tables.

## **DAY 2: Multivariate data analysis and Regression**

- Analyzing multivariate data: Principal Component Analysis (PCA), Hierarchical Clustering Analysis (HCA), Correspondence Analysis, and Multiple Correspondence Analysis (MCA).
- Modeling data: Simple Linear Regression, Multiple Linear Regression, Analysis of variance, and Covariance Analysis.

## **DAY 3: Statistical tests and tips and tricks**

- Statistical hypothesis testing: Parametric tests, Non-parametric tests, and Association tests.
- Tips and tricks to be more effective.

