

## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
ING242	Statistics	4	2	2	0	3	5

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	The objective of this course is to familiarize students with basic concepts and tools of statistical methodology
Content	<ol style="list-style-type: none"><li>1. Statistics as a tool of decision</li><li>2. Statistical series, function of distribution and measures of central tendency</li><li>3. Measures of dispersion</li><li>4. Probability</li></ol>
References	<p>Bernard Grais, "Statistique descriptive", 3eme edition, Dunod, Paris.</p> <p>Vincent Giard, "Statistiques Appliquées a la Gestion", Edition Economica, Paris.</p> <p>Paul Newbold, William L. Carlson, Betty Thorne, "Statistics for Business and Economics", 6th edition, Prentice Hall, Upper Saddle River, New Jersey, 2007</p> <p>Roger C. Pfaffenberger, James H. Patterson, "Statistical Methods for Business and Economics", Irwin 2003 Business Communication Today</p>

## Theory Topics

Week	Weekly Contents
1	Introduction to Statistics
2	Statistical series
3	Graphs to describe numerical variables
4	Measures of central tendency
5	Measures of variability
6	Probability and its postulates
7	Probability Rules
8	Midterm exam
9	Bayes theorem
10	Random variables, mathematical expectation, variance and standard deviation
11	Hypergeometric distribution, Binomial distribution
12	The poisson probability distribution, the normal distribution
13	Discrete random variables and probability distributions
14	Continuous random variables and probability distributions