

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">1. Statistics as a tool of decision2. Statistical series, function of distribution and measures of central tendency3. Measures of dispersion4. Probability |
| References | Bernard Grais, "Statistique descriptive", 3eme edition, Dunod, Paris. Vincent Giard, "Statistiques Appliquées a la Gestion", Edition Economica, Paris. Paul Newbold, William L. Carlson, Betty Thorne, "Statistics for Business and Economics", 6th edition, Prentice Hall, Upper Saddle River, New Jersey, 2007 Roger C. Pfaffenberger, James H. Patterson, "Statistical Methods for Business and Economics", Irwin 2003 Business Communication Today |

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 |