NATIONAL UNIVERSITY OF ENGINEERING
COLLEGE OF ECONOMICS AND STATISTICAL ENGINEERING
STATISTICAL ENGINEERING PROGRAM

EC212 – COMPUTING I

I. GENERAL INFORMATION

CODE	**:**	EC212 Computing I
SEMESTER	**:**	1
CREDITS	**:**	2
HOURS PER WEEK	**:**	4 (Theory – Practice)
REQUISITES	**:**	None
CONDITION	**:**	Mandatory

II. COURSE DESCRIPTION

Computing I course will provide students the basic knowledge of the use of computer tools for academic and professional application, which will allow them to manage their own career data.

The student will know and use basically the tools available in Microsoft Office. For the course will be the Excel spreadsheet, and software for academic and professional use, specific to the professional activity of the career.

III. COURSE OUTCOMES

The student:

1. Constructs tables and graphs of a collection of data for their respective descriptive analysis and interpretation.
2. Builds database in SPSS software.
3. Processes in basic form in SPSS data for its descriptive analysis.

IV. LEARING UNITS

1. **MS-EXCEL CALCULATION SHEET: GENERAL CONCEPTS AND BASIC FUNCTIONS / 8 HOURS**
   Course Introduction / General Concepts and Description of the Environment / Basic Functions / Applications.

2. **MS-EXCEL CALCULATION SHEET: DATA MANAGEMENT (basic level) / 10 HOURS.**
   Information Management / Validation and Security / Basic Descriptive Statistics / Matrices and System of Linear Equations / Applications.

3. **STATISTICAL SOFTWARE: SPSS BASIC STRUCTURE / 10 HOURS**
   Basic Structure of SPSS: Basic Functions / Working File Handling: File Types Recognized by SPSS / Variable Definition / Data File Recording / Save Results / Applications

4. STATISTICAL SOFTWARE: WORKING WITH SPSS / 8 HOURS
Data Set Generation / Export / Variable Transformation / Frequency Distribution / Graph Generation / Central Trend Measures, Dispersion and Shape / Applications.

V. METHODOLOGY

- The teaching methodology is presential.
- The classes are theoretical-practical.
- Use of audiovisual media and computer lab.
- Teamwork

VI. EVALUATING SYSTEM

Evaluation System "I".
Calculation of Final Average: PF = (2 * PP + EP + EF) / 4

PP: Average Practice EP: Partial Exam EF: Final Exam

VII. BIBLIOGRAPHY

1. The Excel 2010 book, Mark Dodge and Craig Stinson, Editorial Anaya Multimedia, 2012 Edition.
2. IBM SPSS Statistics Basic System User Guide 21. Copyright IBM Corporation 1989, 2012.