Code	CBM206	Prerequisites	CBM204
Name	Probability and Statistics	Co-requisites	None

Credits	Contact Hours
04	
Categorization of credits	
Math and basic science	
Engineering topic	
Other	

Coordinator's name	Boanerges Domínguez

Text book
Other supplemental materials
Bluman, A. (2018). Elementary Statistics (10th edition). McGraw-Hill Gomez, M. (2016). Elements of Descriptive Statistics. EUNED Morris DeGroot, M.S. (2014). Probability and Statistics (4th edition). Pearson. Pena, D. (2014). Basics of statistics. Publishing Alliance Triola F., M. (2016). Statistics (11th edition). PEARSON Youtube. Alazapa Tutorials (2014, June 24). Basic concepts of statistics [video]. https://www.youtube.com/watch?v=rIJpjuS9uZc

Description	
Through the subject Probability and Statistics, the student will be able to identify, master and apply conceptual basis and practical approach of statistics, in order to adequately treat and analyze various data related to context. professional and the relevance of the approach to mathematics in educational practice in school spaces. The importance of the subject lies in laying the foundations for the first approach of students with statistics and its application in educational projects from their own teaching practice, with the recording and analysis of simple data. The main units to be developed are: Introduction to Statistics, frequency tables, data position and dispersion, statistical probability and probability dispersion.	
Type of course	☒ Required ☐ Elective

Specific goals for the course

Outcomes of instruction	EG1. Easily handle different software or any technology device in context and varied situations. EG2. Learn autonomously and is permanently updated. EG3. Demonstrate ability to identify problems and propose different solutions, in coordination with professionals from other related areas. EG4.Show ability to work in interdisciplinary and multidisciplinary teams. EG5. Use of the graphing calculator in tasks that require it throughout the course.
Student outcomes	CG1. Identify, formulate, and solve complex engineering problems by applying the principles of engineering, science, and mathematics. CG2. Work effectively in teams whose members collectively provide leadership, create a collaborative and inclusive environment, set goals, plan tasks, and meet objectives. CG3. Develop and conduct appropriate experimentation, analyzes and interprets data, and uses engineering criteria to draw conclusions.

Topics
Unit I. Introduction to statistics Unit II. Frequency Tables and Graph Unit III. Measures of Central Tendency, Position and dispersion of data Unit IV. Statistical Probability Unit V. Probability Distribution for Discrete Random Variable Unit VI. Probability Distribution for Continuous Variable