Code	INI382	Prerequisites	INI339 CBM206
Name	Industrial Statistics	Co- requisites	INI382L

Credits	Contact hours
04	44
Categorization of credits	
Math and basic science	
Engineering topic	X
Other	

Coordinator's name	Demetrio Mota

Text book
Devore, J.L. (2010). Probability and statistics for engineering and science. Thompson International.
Other supplementary materials
Montgomery, D. (1997). Statistics and Probabilities. continental publisher. Perez, Cesar. 2002. Statistics applied through Excel. Madrid: Prentice Hall. Walpole, Ronald E. & Myers, Raymond H. (2008). Probability and statistics Prentice Hall Latin America. Mexico.

Description
This subject provides the student with the statistical tools that allow them to solve complex problems of Industrial Engineering. These tools cover both those used for Descriptive Statistics, in which the participant develops skills that allow them to characterize masses of process data, with which they can diagnose problems that Industrial Engineering must solve. They will also handle the instruments of statistical inference that allow them to formulate hypotheses about the processes to solve the typical problems of these

Type of course	☒ Required ☐Elective _

Specific goals for the course	
Outcomes of instructions	1. Define the problem taking into account the characteristics that it presents. 2. Choose the appropriate Tools to solve the problem. 3. Determine probable causes.

	4. Apply Tools.
	5. Evaluate the consequences of the decisions that result from the solution.
	6. Effectively communicate proposed solutions.
Student outcomes	SO3. Communicate effectively with a variety of audiences.
	SO6. Develop and conduct appropriate experimentation, in which they analyze and interpret data, as well as use engineering criteria to draw conclusions.

Topics
Unit I. Descriptive Statistics
Unit II. Statistical inference
Unit III. Regression
Unit IV. Anova
Unit V. Non-parametric tests