

1. Course number and name
IN2002 Design and Analysis of Experiments
2. Credits and contact hours
3 - 0 - 8
3. Instructor's or course coordinator's name
Héctor Rincón Arredondo
4. Text book, title, author, and year
* Michael H. Kutner, Christopher J. Nachtsheim, John Neter y William Li, Applied Linear Statistical Models, fifth edition, McGraw-Hill, , , Inglés, [0-07-238688-6]
a) other supplemental materials
5. Specific course information
 - a. brief description of the content of the course (catalog description)
This intermediate level course provides students with the necessary tools for designing and conducting experiments and for analyzing and interpreting the resulting data to solve problems. Prerequisites: Probability Distributions, Sampling and Hypothesis Testing. As a result of the course, students will be able to design and conduct experiments according to their discipline, in different contexts, in order to prove hypotheses.
 - b. prerequisites or co-requisites
MA1006
 - c. indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program
Required
6. Specific goals for the course
 - a. specific outcomes of instruction.
Students will be able to: Plan and conduct experiments using experiment design methods and techniques; propose solutions for a problem using experiment design.
 - b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.
Students will design and conduct experiments; they will get, analyze and interpret appropriate data; and will create relevant information for the development of a product or process.
7. Brief list of topics to be covered
Introduction to statistical analysis
Regression analysis

Design of experiments
Factorial design