The main objective is to capacitate the students to model and optimize the behavior of processes. To this end, they will learn how to design the experimentation and to analyze and interpret the obtained results using relevant statistical tools.
220236 - Design of Experiments

Content

**Module 1: Design of Experiments**

<table>
<thead>
<tr>
<th>Learning time: 75h</th>
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<tbody>
<tr>
<td>Theory classes: 27h</td>
</tr>
<tr>
<td>Self study: 48h</td>
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</tbody>
</table>

**Description:**
- Linear Regression
- Two-Level Factorial Designs
- Two-Level Fractional Factorial Designs
- Modeling variability
- Weighted Least Squares
- Sequential Design

**Related activities:**
Theory classes, Practical classes, Self-study, Evaluation Activities.

Qualification system

The final grade depends on the following assessment criteria:
- Linear regression project, weight: 20 %
- Classroom deliverable, weight: 30 %
- Exam, weight: 50 %

Any student who cannot attend any of the written tests (classroom deliverable and/or exam) or that wants to improve the obtained grade, will have the opportunity to improve that grade by taking an additional global written exam that will take place the date fixed in the calendar of final exams. The grade obtained in this test will range between 0 and 10, and will replace that of the two written tests in case it is higher.

Bibliography

**Basic:**


**Others resources:**