

CALIBRATION OF INDUSTRIAL INSTRUMENTS

General information



Semester: **1 and 2**

Language: **English**

Description



In the industrial world, measurement is indispensable to know and ensure that what we make-manufacture is correct or not. But how do we know if the measuring element used (caliper, micrometer, etc.) is working correctly or not? In this course, you will learn how to analyse measurement systems, in order to know and ensure whether the element used is correct or not.

Methodology



- You will have material, documentation and exercises available in Moodle to study asynchronously.
- During the course, you will have the opportunity to carry out practical exercises in order to apply what you have seen theoretically in a real environment (in your usual campus).
- The evaluation will take into account the work submitted and the checkpoint.

Contents



- **Analysis of the measurement system**
 - Introduction
 - Errors in the measurement system
 - Calibration, Repeatability and Reproducibility Studies
- **Introduction to industrial calibration**
 - Calibration plan
 - Uncertainty calculation
- **Repeatability and reproducibility**
 - Continuous variable methods
 - Discrete variable methods