Safety, quality and applications to measurement

ECTS
4 crédits

Hourly volume
186h

Introducing

Description

Objectives

This module provides a theoretical and experimental approach of the main concepts involved in the field of quality, safety, environment and measurement. The following topics are covered:
¿ design of experiments,
¿ Statistical process control.
¿ component failure
¿ Metrology and testing
¿ decision making and risk analysis

This entire course is motivating for the student by putting it in concrete situation with report to the problems they might encounter in his life as a future engineer.
In this framework, the guiding principle of the training is to focus on the one hand on the work group around applications and unifying themes and secondly, strengthening the link between academic courses of their curriculum and the concepts they will required during practical training in laboratory and/or company.

At the end of this UF, the student will:
1 - Be able to define, build and analyze an experimental design of a complex physics problem and have a critical look on the obtained results.
2 - Master the requirements of the space industry in terms of reliability as well as its normative aspects with the consequences that this can sometimes have (limitation of performances, etc...).
3 - Be aware of safety, quality, decision, environmental risks and risk analysis

Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

Practical info

Location(s)

Toulouse

Non-contractual information