Poisson processes and application to reliability and actuarial sciences

ECTS
3 crédits

Hourly volume
35h

Introducing

Description

Objectives

At the end of this module, the student should be able to:

-Know and understand the Poisson process theory fundamentals.
-Estimate the rate of a homogeneous Poisson process and construct confidence intervals and statistical tests for such rate (theoretically and in practice with the R Statistical Software).
-Model the recursive occurrences of the failures on a system, or the claim times in Insurance by Poisson processes.

Necessary prerequisites

-Probability and Statistics (I2MIMT31)
-Statistics (I3MIMT41)
-Elements of Statistical Modeling (I4MATCEMS11)

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