

Mathematics

Probability and Industrial Statistics

IDENTIFICATION

CODE : GMCIP-4-S1-EC-STAT
ECTS : 2.0

HOURS

Lectures : 16.0 h
Seminars : 18.0 h
Laboratory : 0.0 h
Project : 0.0 h
Teacher-student
contact : 34.0 h
Personal work : 34.0 h
Total : 68.0 h

ASSESSMENT METHOD

2 exams (2H, 1H)

TEACHING AIDS

Slides

TEACHING LANGUAGE

French

CONTACT

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AIMS

"This CE is part of the teaching unit Vibrations and transversal tools and contributes to:
Engineering skills in engineering sciences:

1. Analyze a system (real or virtual) or problem
2. Exploit a model of a real or virtual system
3. Implement an experimental approach
5. Process data

School skills specific to the specialty:

10. Define the means of putting into production the mechanical systems products
15. Establish an experimental approach

By allowing the student to work and be evaluated on the following knowledge:

- probabilities, random variables
- sampling, estimation, confidence intervals
- hypothesis tests, anova
- experimental design

By allowing the student to work and be evaluated on the following abilities:

- model the result of an experiment by a probability law
- estimate a confidence interval of an estimate
- implement a production control test
- define a multi-factorial analysis approach based on experimental design"

CONTENT

- "- probabilities
- random variables, usual laws
- sampling, estimation
- hypothesis tests, anova
- experimental design
- "