

## Manufacturing Management

### Research in Industrial Engineering

#### IDENTIFICATION

CODE : GI-5-S1-EC-RGI  
ECTS : 3.0

#### HOURS

Lectures : 10.0 h  
Seminars : 10.0 h  
Laboratory : 6.0 h  
Project : 0.0 h  
Teacher-student  
contact : 26.0 h  
Personal work : 30.0 h  
Total : 56.0 h

#### ASSESSMENT METHOD

Written report + Oral presentation

#### TEACHING AIDS

Depending on the topic of the project.

#### TEACHING LANGUAGE

English

#### CONTACT

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#### AIMS

This teaching unit [EC] contributes to the following skills:

A3 Implement an experimental approach or a production approach

A5 Process data

A6 Communicate an analysis, a scientific approach, a proof or a solution in a reasoned and logical way

B2 Work, learn, evolve independently

B4 Show creativity, innovate, undertake

C1 Observing, measuring, analyzing and interpreting an activity or a system from data

C2 Modeling and designing an information, decision and production system, of goods and services

C3 Evaluating, prototyping and simulating a system

C13 Considering technological and methodological innovation

Skills mobilized :

A1 Analyze a system (real or virtual) or a problem

A2 Exploit a model of a real or virtual system

C8 Managing supply in connection with the planning and inventory management policy

C14 Collectively managing a project: organization, communication, group coordination

C16 Identifying, analyzing and controlling the risks inherent to a project

B3 Interact with others, team work

B7 Work in an international and intercultural context

#### CONTENT

Research methodology [8 hours]: bibliographic management tools, writing a bibliographic analysis, structure of a research article

Research project, in pairs, allowing the student to learn and experiment a research/innovation approach, on a subject proposed and supervised by a teacher-researcher, according to the following steps:

- appropriation of the subject
  - formalization of the research problem and proposal of possible solutions
  - development of solutions and experiments
  - analysis of results, proposal of perspectives
  - writing of a document respecting the editorial standards of a research article
- The project gives rise to a report and a defense.

#### BIBLIOGRAPHY

Depending on the topic of the project.

#### PRE-REQUISITE

Depending on the topic of the project.