Methodological tools

Number of ECTS credits: 3
Coefficient: 3

Description:

- Presentation of the context and the stakes of a functional analysis in the development of a product
- Development of an external functional analysis: APTE method (basic requirement expression, interactor diagram, functional table)
- Development of an internal functional analysis: Establishment of a FAST diagram, Development of the SADT method
- Approach to dysfunctional analysis: Principle of a FMEA product, process

A mini-project will enable the implementation of the approach, using the software tutorialsC (Modules Need, Structure, FMEA)

Pedagogical objectives:

- Conduct a functional analysis approach to develop a product
- Formalize the customer's need for a mechatronic system
- Formalize the technical specifications in a design approach

Bibliography: Prerequisite:

Practice of CAD-CAD software, General Project Conduct

Lectures Hours: 12
Tutorials Hours: 8.5
Labs Hours: 8

Knowledge monitoring modalities: 100% continuous assessement
Assessement: 1 mini-project, 1 exam

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Participants: