Architectures or technological systems

ECTS
7 crédits

Hourly volume
93h

Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

Power transmissions
-Needs for power, associated functions, power architectures in technological systems (mechanic, hydraulic, electric)
-The interest of system modeling, methods and tools,

Computer science & Electronics
- the interest to have a common modeling graphical language, the concepts relative to a object oriented approach.
- Industrial network introduction, interface eelctronics

The student will be able to:
Power transmissions
- identify and structure the power needs (supply, meter, distribute, transform, condition, manage, etc)
- analyse a schematic of a power system (mechanical, hydraulic, electric) at an architectural and functional level
- assess/list/compare solutions for implementing a given function of power transmission
- synthesize a power architecture (mechanical, electrical, electric) from functional needs

Computer science & Electronics
- how to choose the most appropriate diagrams depending on the approach: structure, behaviour, interaction
- Propose an object-oriented UML model of a system
- Implement a technological solution on a mechatronic system

Necessary prerequisites

Basic technological knowledge in mechanics, hydraulics, electrics

Practical info

Location(s)

Toulouse