

## Process control & optimization



ECTS 5 crédits



Hourly volume 63h

# Introducing

Toulouse

### **Objectives**

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

- 1. how to proceed for the simulation and regulation of dynamic systems via an open programming platform and a dynamic system analyzer (Simulink)
- 2. how to formulate and solve an optimization problem (single-objective or multi-objective) through suited methods (derivative-based or evolutionary)

The student will be able to:

3. compare different methods for the regulation and optimization of a dynamic industrial case study (Waste Water Treatment Plant ¿ WWTP)

#### Necessary prerequisites

Process control Balance equations in reactive systems Programming (Matlab)

## Practical info

## Location(s)

