Process control & optimization

ECTS
5 crédits

Hourly volume
63h

Toulouse

Introducing

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)