

Optimization and Stochastic Optimization





Hourly volume 86h

Introducing

Objectives

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

-The theory aiming at caracterise local/global minimum of a real function with or without respect to constraints.

-The main first-order methods in optimisation.

-How to find a subdifferential of a convex function, and a subgradient.

-The worst-case complexity of an algorithm.

At the end of this module, the student should be able to:

-Model and solve an optimisation problem numerically with/without constraint.

Necessary prerequisites

Linear algebra, Calculus, Unconstrained optimisation, Newton and Gauss-Newton algorithms.

Practical info

Location(s)

Q Toulouse

