

Image



ECTS
3 crédits



Hourly volume
36h

Introducing

Location(s)

 Toulouse

Objectives

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

The image acquisition process, the basics and the use of optimization methods for solving inverses problems meet in image processing. The main applications are image restoration, segmentation and registration.

The student will be able to:
manipulate, implement and perform tests on novel image processing methods. In order to do so, the student will need to calculate the gradients, projections and proximal operators he needs to implement an algorithm adapted to structure of his problem.

Necessary prerequisites

- Basics in linear algebra
- Basics in non-linear optimization
- Basics in statistics and probability
- Basics in programming

Practical info