

# UE Quantitative Image Analysis for Mechanics

 ECTS  
3 credits

 Component  
UFR PhITEM  
(physique,  
ingénierie, terre,  
environnement,  
mécanique)

 Semester  
Automne

- > **Teaching language(s):** English
- > **Open to exchange students:** No
- > **Code d'export Apogée:** PAX9CEAS

## Presentation

### Description

In this class we teach the different operations that can be done on 3D tomographic images in order to handle noise and measure geometrical and topological quantities of the material's microstructure.

We also teach how we can measure kinematic fields from a set of images using digital volume correlation. Finally examples of Finite Element simulations using information from the images are proposed.

### Course parts

UE Quantitative Image Analysis for Mechanics - CM	Lectures (CM)	10h
UE Quantitative Image Analysis for Mechanics - TP	Practical work (TP)	10h

**Period :** Semester 9

## Useful info



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## Campus

› Grenoble - University campus