


UE Fluid mechanics

 ECTS
3 credits

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

 Semester
Automne

- > **Teaching language(s):** French
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** PAX7MEAB

Presentation

Description

This course provides basics in fluid mechanics. This includes hydrostatic, fluid kinematics and Euler equation for ideal fluid. Bernoulli formula are then derived and examples of application are presented. The case of non-ideal fluid and Navier-Stokes formula are afterwards established. The NS equation is solved for classical simple cases (e.g. Couette flow). Turbulence is shortly introduced during a 3h practical course held at the Coriolys experiment.

This course comprises 21h of CM/TD, and a 3h practical course.

The final exam is a 2h examination. The "controle continu" is a written homework.

Course parts

CMTD	Lectures (CM) & Teaching Unit (UE)	18h
TP	Practical work (TP)	6h

Period : Semester 7

Useful info

Contacts

Program director

Eric Quirico

✉ Eric.Quirico@univ-grenoble-alpes.fr

Place

› [Grenoble](#)

Campus

› [Grenoble - Saint-Martin d'Hères](#)