

# UE Transfer in Porous Media

 ECTS  
6 credits

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

 Semester  
Automne

- > **Teaching language(s):** French
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** PAX9HMAA

## Presentation

### Description

This course deals with the simulation of (a) groundwater flows, (b) contamination plumes and (c) heat fluxes, in saturated and unsaturated porous media, using numerical models (Feflow and Hydrus). The associated keywords are direct and inverse modelling, groundwater, contamination, geothermal energy. The practical and research implications are the modelling of infiltration, groundwater recharge, flow fields and contaminant fate, the design of remediation systems, heat pumps (low and high energy, i.e. subsurface and deep) and water production systems.

Prerequisite:

- \* M1 STE-UGA (or equivalent) hydrological or hydrogeological courses.
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Language

The course is taught in French. Supplements in English are provided if necessary for non-French speaking students.

### Course parts

UE Transferts en milieu poreux-CM/TD	Lectures (CM) & Teaching Unit (UE)	36h
UE Transferts en milieu poreux-TERRAIN	Terrain	6h

# Useful info

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## Campus

› [Grenoble - University campus](#)