


# UE Hydrogeology

 ECTS  
6 credits

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

 Semester  
Printemps

- > **Teaching language(s):** French
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** PAX8HRAC

## Presentation

### Description

*This module deals with flow in saturated porous media. The first part teaches the natural flow of water (development of piezometric maps, determination of streamlines, discrimination of flow systems, variation of reserves, calculation of mass balances, Darcy, etc.). The second part deals with the anthropic disturbance of the natural flow (hydrodynamics of wells and consequences on the aquifer and its functioning, e.g. pumping tests; development of analytical solutions with a dedicated Python-based software). The third part deals with mass transfer in solution (fate of contaminants and anthropogenic tracers in the aquifer). Practical lessons on real cases are provided (implementation of pollution control systems, water production, prediction of the fate of pollutants (sorption, degradation)).*

Language : français // Language : french

### Course parts

UE Hydrogéologie / Hydrogeology-CM/TD

Lectures (CM) & Teaching Unit (UE)

42h

## Useful info



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## Campus

➤ [Grenoble - University campus](#)