

- Faculté des sciences
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### Introduction to hydrogeology and hydrology (3GH2159)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en hydrogéologie et géothermie (*)</b>	<b>Cours: 30 pg</b>	Voir ci-dessous	8

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

#### Période d'enseignement:

- Semestre Automne

#### Equipe enseignante:

Philip Brunner

#### Objectifs:

The course will provide an overview of basic hydrological and hydrogeological processes and methods and discusses the importance of groundwater in the hydrologic cycle

#### Contenu:

- Introduction to hydrology : Water balance approaches, rainfall runoff relations, measurement approaches for the key components of the hydrologic cycle
- Introduction to hydrogeology: Groundwater systems, hydraulic heads, porosity, groundwater flow equation

#### Forme de l'évaluation:

3 hours written exam (together with "Mathématiques et statistique" and "Introduction to geothermics") . If the exam is not passed, a new written exam will be organised for the next exam session.

#### Documentation:

- course notes as handouts
- solutions to all exercises available on request

#### Pré-requis:

basic calculus and physics  
basic understanding of earth systems sciences  
basic geology

#### Forme de l'enseignement:

Theory and corresponding exercises are presented and solved during the course

(\*) Cette matière est combinée avec d'autres matières pour l'évaluation