

- Faculté des sciences
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**Numerical modelling of transport and geomechanical processes I (3GH2224)**

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en hydrogéologie et géothermie</b>	<b>Cours: 28 pg</b>	Voir ci-dessous	3

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

**Période d'enseignement:**

- Semestre Printemps

**Equipe enseignante**

J. Epting, Zechner E.

**Contenu**

This course introduces lectures and exercises on Numeric Modeling, Groundwater flow and heat-transport. After an introduction and an overview of the fundamentals of thermodynamics, different degrees of complexity of heat transport and density-dependent flow modeling (GIS approaches, GIS, FeFlow, hydraulic & thermal numerical calculations) are covered. The focus is on shallow and medium-depth geothermal energy.

**Forme de l'évaluation**

Semester work (contrôle continu noté), final presentation

**Modalités de rattrapage**

Students are required to submit 4 short reports, whether they were physically present or not

**Documentation**

Powerpoint lectures, documents & data for exercises

**Pré-requis**

Hydrogeological Systems, Resource Management, Geodynamics, Geothermics

**Forme de l'enseignement**

lectures and in-class exercises