

- Faculté des sciences
- [www.unine.ch/sciences](http://www.unine.ch/sciences)

### Numerical modelling of transport and geomechanical processes (3GH2212)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en hydrogéologie et géothermie</b>	<b>Cours: 56 pg</b>	Voir ci-dessous	6

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

#### Période d'enseignement:

- Semestre Printemps

#### Equipe enseignante

Prof. S. Miller  
G. Toussaint (PhD student)

#### Contenu

Finite differences, Matlab programming, COMSOL Multiphysics

#### Forme de l'évaluation

CA graded. 1st attempt validated in the session following the end of the course.

Retake attempt: must be organized with professor at a later session (not in Pidex)

#### Documentation

Textbook. Numerical Geodynamic Modeling by Taras Gerya.  
The Finite Element Method using MATLAB by Guy Simpson.  
Powerpoint lectures

#### Pré-requis

Geodynamics, earthquake physics and geothermics

#### Forme de l'enseignement

Lectures  
Computer exercises  
Computer programming