

- Faculté des sciences
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Advanced Geothermics and earth energy resources (3GH2177)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en hydrogéologie et géothermie	Cours: 30 pg	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

L. Guglielmetti and B. Valley

Contenu

The goal of this course is to present advanced topics in energy-related utilisation of the subsurface with a primary focus on geothermal energy, but including also other topics as for example CO2 capture and sequestration (CCS).

- Geothermal energy principles and applications
- Uncertainties in geothermal exploration
- Geochemistry of geothermal fluids
- Geophysical methods in geothermal exploration
- Drilling Geothermal Wells
- Ground Source Heat Pumps
- Geothermal Power Plants
- Geothermal Potential Assessment
- Capture and sequestration of CO2

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 latest session

Documentation

Supporting material is provided on-line.

Pré-requis

Introduction to geothermics

Forme de l'enseignement

Theory in the classroom, field visits and exercises