French Educational plan

Pre-university studies

* 3 years pre-school (entering at 3 years)
* 9 years ground scool (entering at 6 years)
* 3 years high school (entering at 15 years)
* 1 year high school diploma (entering at 18 years).

University studies 3 – 5 – 8 licence – master – thesis system

* 3 years undergraduate studies (entering at 19 years)
* **2 years master studies (entering at 22 years)** [1)]
* 3 years thesis (entering at 24, ending at 27 years)

1) of interest with respect to integration of RUPP and NUOL students. 2

Enteringt the 1st master year:

Pre-master studies:

* In the undergraduate courses the studens obtain a valid sceintific base (geology, mathematics, physics, chemistry) (Different pathways, but all related to natural sciences)

Contract

* A contract is signed with the student, which decides about its future freedom of choice dependent on its former results;
  > possibiliies: acceptance guaranteed, possible, poorly probable.

The first master year:

3 orientations:

Gelogical orientation: (Cartography, Morphology, Sedimentology, Tectonics, Volcanology, satellite image analysis)

Geophysical orientation (Geophysics, informatics, programming, Signal ;analysis, Seismic risks), fluid mechanics, the inner earth.

1) Environmental orientation: (Aquous and atmospheric chemistry, hydrology, Paleoenvironnments (analysis of sediment and ice cores, soil chemistry and soil pollution, flooding risks).

1) of interest with respect to integration of RUPP and NUOL students.

Success rate: * At the end of the 1st master year, 35% of the students do not obtain the required quote to enter the 2nd master year in the first attempt.

Entering the second master year:

Two principal choices:

Research career

Continuation of studies

M2R OAH (envir. & atmosphere)
M2R Terre solide (Geophys. & Nat. risks)

>Thesis

Associated laboratories:
LGGE LGIT LTHE LGCA LAOG

Professionnal career

no continuation

[1)] **M2P Groundwater (GW)**
M2P GER

>Engineering diploma

Typical hiring compagnies
[1)] **GW: environental consulting and engineering societies, NGO. public water supply & analysis**
GER: geophysics, risk assessment
Oil compagnies

> Strong selection at reception of the students (20 received from 225 offers)
> 100% of the selected candidates obtained in 2007 the diploma
> other pathways (e.g. high scool teaching) not given.

[1)] Of interest with respecto to NUOL and RUPP student integrations:

Teaching in the M2P-GW

General hydrogeology, pumping, boreholes techniques and core analysis;

Groundwatger resource protection;

Decontamination of soils and groundwaters;

General environmental legislation, Querries & rehabilitation studies;

Water quality, chemistry & treatment,

Waste management, Geophysics.

34% of teachings performed from non-university affiniliated professionales

10 days of outdoor teaching

6 month training in public or private society

Evolution keystones

Heads of enironmental business consulting & travaux compagnies

- ***Sociab ility and leadership of the stydents*: *Autonomy, Communication, Quality of Reports***
- ***« Geological eye» (Sorties ateliers)***
- ***Up to date computing tools:* (*Modflow,Autocad,Mapinfo)***

Ancient students

- ***Teaching ⇔ market needs***: Urban hydraulics, Reglementation, Management.
- ***More computing :*** Autocad…

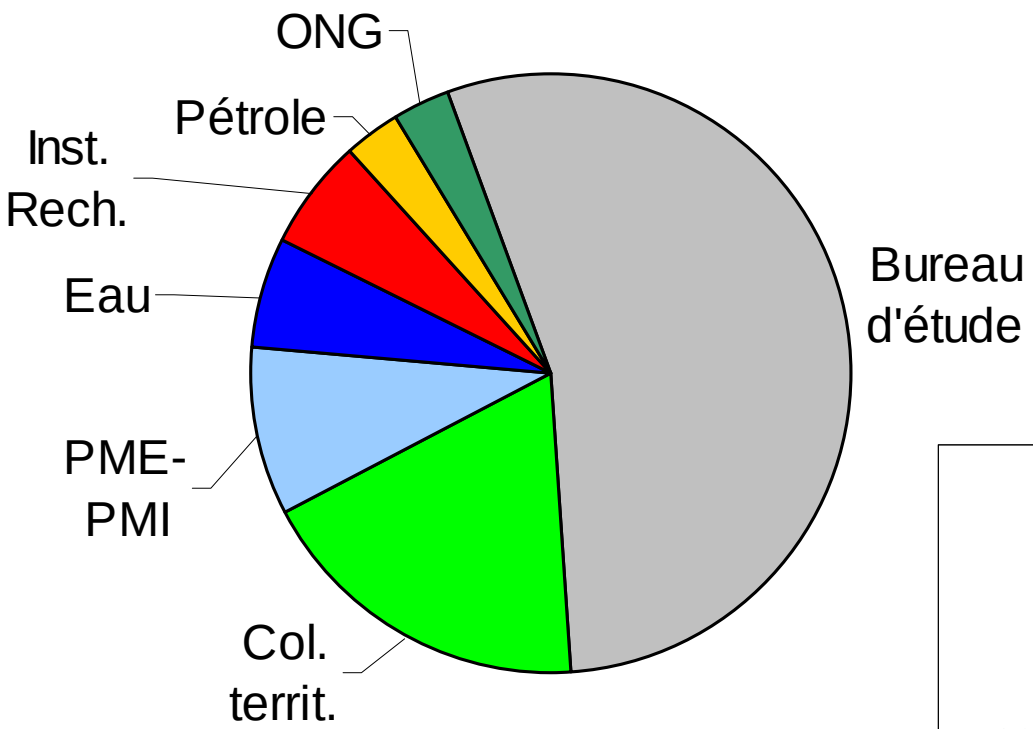
Actual students

- ***Teaching charge distrib***
- ***More project_related courses***

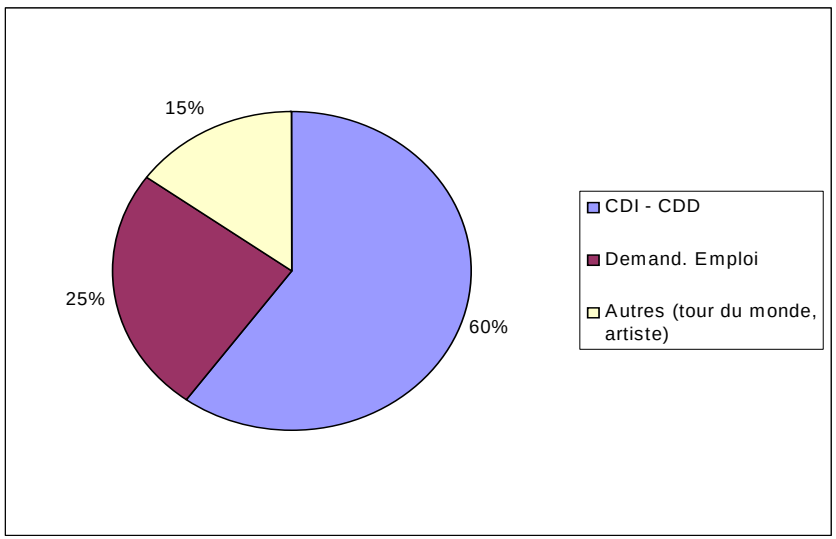
Teaching staff

- ***Too much courses***
- ***Financial support from business compagnies:***
- ***Quality enhancement of the student selection process.***

Hiring profile



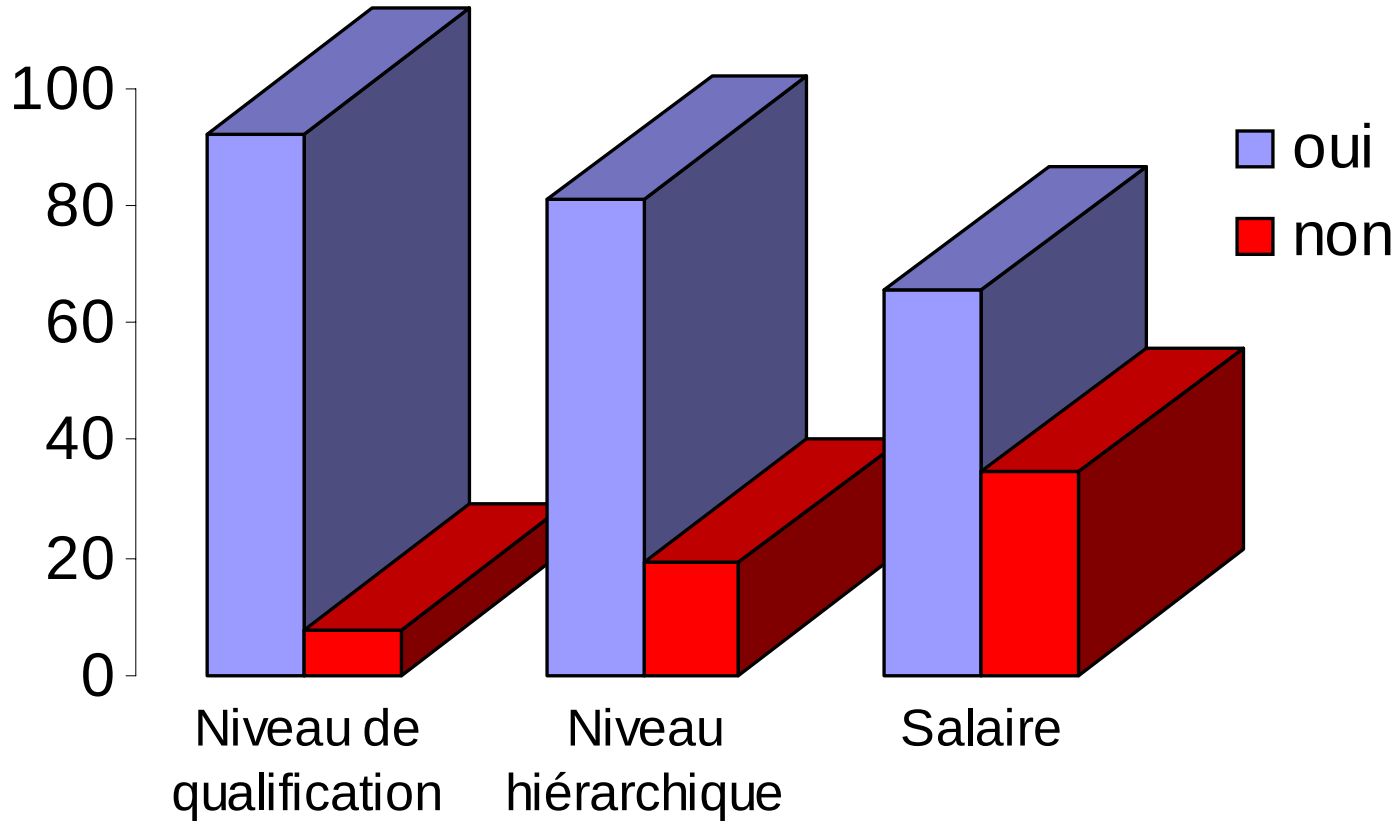
After one year…



M2P- ES: examples of professionnal training

Entreprises	Thème du stage
Instituto de Ingéniera – Seccion Geotechnica Mexico	Contribution à la modélisation du phénomène de subsidence de la ville de Mexico
SAFEGE Environnement, Clermont Ferrand	Etude hydrogéologique en milieu alluvial. Application au champ captant AEP du Cendre (Puy de Dôme)þ
GRS Valtech Marseille	Réhabilitation des sites et sols pollués. Travaux de dépollution in situ
Ecole Nationale des Travaux Publics de l'Etat 69120 Vaulx en Velin	Modélisation numérique 3D des écoulements dans la zone non saturée urbaine : application à un bassin d'infiltration d'eaux pluviales
CPIE (Association) Seignanx & Adour	Etude hydrogéologique des terrains du futur parc d'activités économiques du Seignanx
ARCHAMBAULT Conseil	Etudes hydrogéologiques (faisabilité, pompe à chaleur)þ
G_ENVIRONNEMENT – Grenoble	Diagnostics de pollution et études hydrogéologiques
HYDROPHY SAS – Lans en Vercors	Mesures et reconnaissances hydrogéophysiques
Etablissement Public Territorial du Bassin de la Dordogne	Gestion quantitative de la ressource en eau sur des bassins versants soumis à une forte pression de prélèvements
HYDROGEOSPHERE – Axat	Mise en conformité de périmètre de protection – Dossier ICPE – Cartographie - Modélisation
ERG Environnement , Marseille	Réalisation de diagnostics de sols et d'études
Instituto Geologico y Minero de Espana, Madrid	Etudes hydrogéologiques

Satisfaction indices



Nicole Revol et François Renard, 2006

Anglais:

- Valider le niveau B1 dans un langue étrangère (sinon le diplôme de master ne peut pas être donné)þ

- Certains cours du M2P en anglais, deux rapports en anglais, un oral.

Requirements:

* Most courses are in french.

* Solid scientific educational bases

* Obtain the equivalence of the diploma to enter the french university
  >> For enterine the M2P: completed four university years of eduction.
  >> For entering the M1: completed three university years of education

For the project: Integration into the M2P of highest interest, as

- Students obtain a solid educational bases in scientific engineering
- 6-month training allows work on cambodgian and laotien sites.
- Possible 2-years training (entering M1, continuing in M2P) ?

Proposition of the 'ideal' schedule:

> 1: Contact with students before start of the exchange
> 2: Prior work on defined site
> 3: Integration in the formation for 6 month
> 4: month work on site and analysis of environmental samples

Observatoire OSUG des Sciences de l'Univers de Grenoble

END

Pour se renseigner:

-Discuter avec les responsables de spécialité

- Venir aux soutenances (de 10-12/09/2008)þ

- Faire un stage M1 dans une entreprise du secteur Géophysique ou Environnement

M2P *Eaux Souterraines*

François Renard, LGCA & Cédric Legout, LTHE

Francois.Renard@ujf-grenoble.fr

Cedric.Legout@hmg.inpg.fr

M2P *Géophysique Exploration Risques*

Jean Virieux, LGIT & Elisabeth Carrio, LGIT

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Elisabeth.Carrio@ujf-grenoble.fr

Salaire en sortie du M2P

Un Master 2 est un diplôme de grade ingénieur

M2P (Ingénieur d'étude) dans un bureau d'étude

Actuellement, 50% des étudiants des années précédentes ont un salaire compris entre 16 et 19 k€ net (11 k€ net = SMIC).

Dans une négociation salariale (CDD, CDI), vous pouvez vous baser sur une base de 24 k€ brut/an (soit 2000 € brut/mois sur 12 mois). Cela correspond à 1500 € net/mois.

M2P (Ingénieur d'étude) dans une grande entreprise

27 k€ net/an (2000 € net/mois sur 13 mois), voir plus si expatriation

(salaire net = 75% salaire brut environ)þ