

## One-year master program

### Compulsory courses

GEOL0210-1	<i>Fieldwork in foreign countries Holder</i> - Frédéric BOULVAIN, Nathalie FAGEL, André-Mathieu FRANSOLET, Emmanuelle JAVAUX, Edouard POTY, Jacqueline VANDER AUWERA - [10d FW]	-	-	[+]	6
GEOL0262-1	<i>Geological mapping (personnal fieldwork)</i> - Hans-Balder HAVENITH - [30d FW]	-	-	[+]	10
STRA0010-1	<i>Bibliographic project work (related to the Master's Thesis) + Oral presentation of the research project work</i> - Annick ANCEAU	-	-	-	4
SMEM0021-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	20

### Optional courses

Choose, in agreement with the Board of Studies, several courses totalling 20 credits, amongst :

#### Paleontology-Sedimentology

GEOL0215-1	<i>Clay Geology</i> - Nathalie FAGEL	15	15	-	3
GEOL0214-1	<i>Sedimentary deposits</i> - Edouard POTY - [2d FW]	15	15	[+]	4
GEOL0218-1	<i>The principles and methods of evolution</i> - Edouard POTY	15	-	-	2
GEOL0263-1	<i>Astrobiology</i> - Philippe CLAEYS, Véronique DEHANT, Moreno GALLEN, Emmanuelle JAVAUX, Yaël NAZE, Annick WILMOTTE	30	15	-	4
GEOL0229-1	<i>Oil geology</i> - Pierre CORNET	15	15	-	3
GEOG0212-1	<i>Pedology</i> - - Suppl : Patrick ENGELS - [1d FW]	15	8	[+]	3
GEOL0264-1	<i>Complements of micropaleontology</i> - Emmanuelle JAVAUX	15	15	-	3
GEOL0222-1	<i>Further sedimentary petrology</i> - Frédéric BOULVAIN	15	15	-	3
[...]	1 or 2 courses in another module or in the University of Liège programme of courses				

#### Geochemistry-magmatic petrology

GEOL0209-1	<i>Isotopic geochemistry</i> - Jacqueline VANDER AUWERA	20	-	-	2
GEOL0255-1	<i>Geological oceanography</i> - Nathalie FAGEL	20	20	-	4
GEOL0223-1	<i>Supplements to Tectonics</i> - Olivier BOLLE	15	15	-	3
GEOL0217-2	<i>Metallogeny</i> - Michel GAUTHIER	15	15	-	3

Notice : organised every other year as from 2009-2010

GEOL0254-1	<i>Gravimetrics, magnetism, and their geological applications</i> - Michel EVERAERTS	15	15	-	3
GEOL0228-1	<i>Crystalchemistry of rock-forming minerals</i> - André-Mathieu FRANSOLET	20	-	-	2
GEOL0265-1	<i>Advanced igneous petrology</i> - Jacqueline VANDER AUWERA	20	30	-	4
[...]	1 or 2 courses in another module or in the University of Liège programme of courses				

#### Environment and subsoil management

GEOL0266-1	<i>Groundwater contamination and protection</i> - Alain DASSARGUES	15	15	-	3
GEOL0020-3	<i>Mineral resources</i> - Eric PIRARD	20	20	-	4
GEOL0267-2	<i>Environmental Geology</i> - Hans-Balder HAVENITH - [1d FW]	30	15	[+]	4
GEOL0023-2	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [3d FW]	25	25	[+]	5
GEOL1021-1	<i>Introduction to geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5h 30 FW]	30	30	[+]	5
GEOL0294-1	<i>Paleoalterations in geological times</i> - Johan YANS - [1d FW]	12	12	[+]	3
[...]	1 or 2 courses in another module or in the University of Liège programme of courses				

## Two-year master program

### First Year

#### Compulsory courses

GEOL0210-1	<i>Fieldwork in foreign countries Holder</i> - Frédéric BOULVAIN, Nathalie FAGEL, André-Mathieu FRANSOLET, Emmanuelle JAVAUX, Edouard POTY,	-	-	[+]	6
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ANDER AUWERA - [10d FW]				
GEOL0262-1	<i>Geological mapping (personnal fieldwork)</i> - Hans-Balder HAVENITH - [30d FW]	-	-	[+] 10
STRA0010-1	<i>Bibliographic project work (related to the Master's Thesis) + Oral presentation of the research project work</i> - Annick ANCEAU	-	-	4

#### Optional courses

Choose two modules from :

##### Paleontology-Sedimentology Module

Choose, in agreement with the Board of Studies, several courses totalling 20 credits, amongst :

GEOL0215-1	<i>Clay Geology</i> - Nathalie FAGEL	15	15	-	3
GEOL0214-1	<i>Sedimentary deposits</i> - Edouard POTY - [2d FW]	15	15	[+]	4
GEOL0263-1	<i>Astrobiology</i> - Philippe CLAEYS, Véronique DEHANT, Moreno GALLEN, Emmanuelle JAVAUX, Yaël NAZE, Annick WILMOTTE	30	15	-	4
GEOL0229-1	<i>Oil geology</i> - Pierre CORNET	15	15	-	3
GEOG0212-1	<i>Pedology</i> - - Suppl : Patrick ENGELS - [1d FW]	15	8	[+]	3
GEOL0264-1	<i>Complements of micropaleontology</i> - Emmanuelle JAVAUX	15	15	-	3
GEOL0222-1	<i>Further sedimentary petrology</i> - Frédéric BOULVAIN	15	15	-	3
[...]	1 or two courses in the module not chosen or in the University of Liège programme of courses				

##### Magmatic Geochemical-Petrology Module

Choose, in agreement with the Board of Studies, several courses totalling 20 credits, amongst :

GEOL0209-1	<i>Isotopic geochemistry</i> - Jacqueline VANDER AUWERA	20	-	-	2
GEOL0255-1	<i>Geological oceanography</i> - Nathalie FAGEL	20	20	-	4
GEOL0223-1	<i>Supplements to Tectonics</i> - Olivier BOLLE	15	15	-	3
GEOL0217-2	(pas organisé en 2008-2009) <i>Metallogeny</i> - Michel GAUTHIER	15	15	-	3
	<i>Notice</i> : organised every other year as from 2009-2010				
GEOL0254-1	<i>Gravimetrics, magnetism, and their geological applications</i> - Michel EVERAERTS	15	15	-	3
GEOL0228-1	<i>Crystal chemistry of rock-forming minerals</i> - André-Mathieu FRANSOLET	20	-	-	2
GEOL0265-1	<i>Advanced igneous petrology</i> - Jacqueline VANDER AUWERA	20	30	-	4
[...]	1 or 2 courses in the option not chosen, or in the University of Liège programme of courses				

##### Environment-Management of the Subsoil Module

Choose, in agreement with the Board of Studies, several courses totalling 20 credits, amongst :

GEOL0266-1	<i>Groundwater contamination and protection</i> - Alain DASSARGUES	15	15	-	3
GEOL0020-3	<i>Mineral resources</i> - Eric PIRARD	20	20	-	4
GEOL0267-2	<i>Environmental Geology</i> - Hans-Balder HAVENITH - [1d FW]	30	15	[+]	4
GEOL0023-2	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [3d FW]	25	25	[+]	5
GEOL1021-1	<i>Introduction to geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5h FW]	30	30	[+]	5
GEOL0294-1	<i>Paleoalterations in geological times</i> - Johan YANS - [1d FW]	12	12	[+]	3
[...]	1 or 2 courses in the option not chosen, or in the University of Liège programme of courses				

#### Second year

##### Compulsory courses

SMEM0022-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	28
GEOL0268-1	<i>Introduction to Research</i> - N...	-	-	-	2

##### Research Focus

**Compulsory courses**

SSTG0011-1	<i>Training</i> - Edouard POTY	-	-	-	<b>10</b>
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**Optional courses**

**Choose two modules from :**

**Paleontology-Sedimentology Module**

Choose, in agreement with the Board of Studies, several courses totalling 10 credits, amongst :

GEOL0218-1	<i>The principles and methods of evolution</i> - Edouard POTY	15	-	-	<b>2</b>
SPAT0027-2	<i>Climate change and impacts</i> - Louis FRANÇOIS, Guy MUNHOVEN	15	-	-	<b>2</b>
GEOL0224-1	<i>Paleoclimatology</i> - Nathalie FAGEL	15	15	-	<b>3</b>
GEOL0220-1	<i>Cainozoic Stratigraphy</i> - Emile ROCHE	15	-	-	<b>2</b>
PALE0208-2	<i>Advanced topics in Paleobotanics</i> - Philippe GERRIENNE	15	15	-	<b>3</b>
[...]	1or 2 courses in the option not chosen, or in the University of Liège programme of courses				

**Magmatic Geochemical-Petrology Module**

Choose, in agreement with the Board of Studies, several courses totalling 10 credits, amongst :

GEOL0225-3	<i>Analytical Geochemistry</i> - Nathalie FAGEL	10	10	-	<b>2</b>
GEOL0256-1	<i>Geochemistry of sediments and interstitial waters.</i> - Nathalie FAGEL	15	15	-	<b>3</b>
GEOL0213-1	<i>Geodynamics</i> - - Suppl : Jean-Paul LIÉGEOIS	15	-	-	<b>2</b>
CLIM0009-1	<i>Biogeochemical cycle modelling and global changes</i> - Louis FRANÇOIS	20	20	-	<b>3</b>
[...]	1or 2 courses in the option not chosen, or in the University of Liège programme of courses				

**Environment-Management of the Subsoil Module**

Choose, in agreement with the Board of Studies, several courses totalling 10 credits, amongst :

GCIV0620-1	<i>Introduction to geotechnics</i> - Robert CHARLIER - [1d FW]	30	20	[+]	<b>5</b>
MINE0005-1	<i>Mine and Quarry Working</i> - Jacques TACK	20	-	-	<b>2</b>
SPOL2209-3	<i>Politics of sustainable development (land and environment)</i> - Quentin MICHEL	30	-	-	<b>3</b>
GEOL0270-3	<i>Natural risk</i> - Hans-Balder HAVENITH - [5d FW]	30	15	[+]	<b>6</b>
[...]	1or 2 courses in the option not chosen, or in the University of Liège programme of courses				