

## Block view of the study programme

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### Block 1

#### Compulsory courses

GEOL0210-1	<i>Fieldwork in foreign countries</i> - Olivier BOLLE, Bernard CHARLIER, AnneChristine DA SILVA, Nathalie FAGEL, Valentin FISCHER, Frédéric HATERT, HansBalder HAVENITH, Cyrille PRESTIANNI, Jacqueline VANDER AUWERA - [10d FW]	Q2	-	-	[+]	5
GEOL0301-1	<i>Cartography and geomodelling (personnal work)</i> - HansBalder HAVENITH - [15d FW]	TA	10	30	[+]	10

#### Optional courses

In agreement with the Jury, choose courses not already taken for a total of 45 credits, in at least two different fields, among:

##### Resources and methods

GEOL0209-1	<i>Isotopic geochemistry</i> - Jacqueline VANDER AUWERA (Odd years)	Q1	20	10	-	3
GEOL1041-1	<i>Gemmology</i> - Frédéric HATERT	Q1	15	15	-	3
GEOL0296-1	<i>Clays and environment</i> - Nathalie FAGEL - [1d FW] (Even years)	Q1	15	15	[+]	4
GEOL0020-7	<i>Mineral resources (english language)</i> - Eric PIRARD - [1d FW, 26h Labo., 32h Proj.]	Q1	26	-	[+]	5
GEOL0277-1	<i>Groundwater quality and protection (english language)</i> - Serge BROUYÈRE - [1d FW, 35h Proj.]	Q1	20	20	[+]	5
GEOL0313-1	<i>Remediation of contaminated sites (english language)</i> - Serge BROUYÈRE - [2d FW, 40h Proj.]	Q1	24	24	[+]	4
GEOL0237-2	<i>Exploitation of mineral deposits (english language)</i> - Nicolas VASBINDER - [2d FW]	Q1	25	15	[+]	5
GEOL0021-7	<i>Geophysical prospecting</i> - Frédéric NGUYEN - [5d FW, 20h Proj.]	Q2	26	20	[+]	5
GCIV0620-1	<i>Introduction to geotechnics</i> - Part A - Bertrand FRANÇOIS - [1d FW] - Part B - Bertrand FRANÇOIS	Q1	20	10	[+]	5
CRIS0204-1	<i>Complement of crystallography</i> - Frédéric HATERT	Q2	15	10	-	3
GEOL1040-1	<i>Metallogeny</i> - Bernard CHARLIER	Q2	15	15	-	4
GEOL0008-2	<i>Hydrocarbons and energy transition - Exploration</i> - Energy context and exploration of hydrocarbons - Pierre CORNET - Additional theory and practice - Pierre CORNET	Q1	15	-	-	4
GEOL1050-1	<i>Hydrocarbons and the energy transition - Techniques for extracting hydrocarbons and reducing emissions</i> - Xavier LIMPENS	Q1	15	-	-	3
GEOL1046-1	<i>Geothermal energy (english language)</i> - Bertrand FRANÇOIS - [40h Proj., 1d FW]	Q2	18	15	[+]	5
PHYS0999-1	<i>Digital creation in sciences</i> - Roland BILLEN, Valentin FISCHER, Pierre MATHONET, JeanChristophe MONBALIU, Eric PARMENTIER, Nicolas VANDEWALLE - [30h Proj.]	TA	10	-	[+]	5

##### Evolution of the Earth and the biosphere

GEOL0099-1	<i>Biodiversity and extinctions (english language)</i> - Valentin FISCHER - [2d FW]	Q1	25	-	[+]	3
GEOL0224-2	<i>Paleoclimatology</i> - Nathalie FAGEL - [1d FW]	Q1	15	15	[+]	3
GEOL1022-2	<i>Origin and early evolution of life (english language)</i> - Emmanuelle JAVAUX	Q1	20	10	-	3
GEOL1049-1	<i>Palaeobiology (english language)</i> - Julien DENAYER, Valentin FISCHER - [2d FW]	Q1	25	15	[+]	4

SPAT0027-3	<i>Climate change and impacts</i> (english language) - Louis FRANÇOIS, Guy MUNHOVEN	TA	30	30	-	5
CLIM0009-1	<i>Biogeochemical cycle modelling and global changes</i> - Louis FRANÇOIS	Q1	20	20	-	4
SPAT0054-1	<i>Astrophysics and astrochemistry</i> - Michaël DE BECKER	Q2	20	-	-	3
GEOL0263-1	<i>Astrobiology</i> (english language) - Vincianne DEBAILLE, Emmanuelle JAVAUX, Yaël NAZÉ, Annick WILMOTTE	Q2	45	-	-	5
GEOL0282-2	<i>Sedimentary and environmental geochemistry</i> - Nathalie FAGEL	Q1	15	15	-	3
GEOL1023-1	<i>Palynology</i> - Cyrille PRESTIANNI	Q2	30	-	-	4
<b>Geological processes</b>						
GEOG0670-1	<i>Active Tectonics and Seismology</i> (english language) - Clara BRERETON, HansBalder HAVENITH, Aurelia HUBERT - [2d FW]	Q1	20	10	[+]	5
GEOL0319-1	<i>Geological hazard and risk assessment, From theory to field work</i> (english language) - HansBalder HAVENITH - [2d FW, 20h Proj.] (Odd years)	Q2	20	5	[+]	5
GEOL0213-1	<i>Geodynamics</i> - N...	Q2	15	-	-	3
GEOG0212-1	<i>Pedology</i> - Gilles COLINET, JeanThomas CORNELIS - Suppl : Gilles COLINET, Marie DINCHER - [1d FW] (Even years)	Q2	15	8	[+]	3
GEOL1039-2	<i>Geological oceanography, From theory to field work</i> - Nathalie FAGEL - [1d FW]	Q1	20	20	[+]	4
GEOL0256-1	<i>Marine sediment geochemistry</i> (english language) - Nathalie FAGEL	Q1	15	15	-	4
GEOL0292-1	<i>Sedimentology applied to archaeology</i> - Stéphane PIRSON - [8d FT Tr. Pr.]	Q2	30	-	[+]	5
GEOL0302-1	<i>Volcanology</i> - Jacqueline VANDER AUWERA (Even years)	Q1	15	15	-	4
GEOL0223-1	<i>Complement of tectonics</i> - Olivier BOLLE (Even years)	Q2	15	15	-	4
[...]	One or two listed courses chosen from programmes in other parts of the Faculty of Sciences, other faculties or other universities.					

#### Block 2

##### Cours obligatoire de la finalité

SSTG0011-1	<i>Work placement</i> - COLLÉGIALITÉ, Valentin FISCHER - [4w Internship]	Q2	-	-	[+]	10
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##### Cours au choix de la finalité

Choose courses, with the approval of the Jury, totalling 20 credits among :

- [...] choose extra courses from the ULiège curriculum that haven't already been chosen for a total of 11 to 20 credits
- [...] Maximum 9 ECTS can be chosen in the courses' programme of another university

##### Compulsory courses

SMEM0022-1	<i>Final thesis</i> - COLLÉGIALITÉ, Jacqueline VANDER AUWERA	TA	-	-	-	27
GEOL0318-1	<i>Scientific writing and communication</i> - Annick ANCEAU, COLLÉGIALITÉ	Q1	10	10	-	3

##### Bloc d'aménagement du programme de l'année

## Additional ECTS (max 60) Master in geology (120 ECTS)

##### Compulsory courses

GEOL1033-1	<i>Crystallography and Mineralogy - Part A</i> - Frédéric HATERT	Q1	20	30	-	4
PALE0202-3	<i>Paleobotany</i> - Cyrille PRESTIANNI - [1d FW]	Q2	20	20	[+]	4

GEOL1034-1	<i>Crystallography and Mineralogy - Part B</i> - Frédéric HATERT - [3d FW]	Q2	10	20	[+]	<b>4</b>
GEOL0018-1	<i>Sedimentology and sedimentary petrology</i> - AnneChristine DA SILVA	Q1	20	20	-	<b>4</b>
GEOL0029-5	<i>Tectonics</i> - Part A - Olivier BOLLE - Part B - Olivier BOLLE	Q1	30	20	-	<b>5</b>
			10	10	-	
GEOL0013-5	<i>Hydrogeology</i> - Part A - [1d FW] - Part B - [10h Proj.]	Q1	26	20	[+]	<b>4</b>
			-	-	[+]	
GEOL0320-1	<i>Cosmochemistry and geochemistry</i> - Jacqueline VANDER AUWERA	Q1	25	-	-	<b>2</b>
GEOL1035-1	<i>Magmatic Petrology</i> - Jacqueline VANDER AUWERA	Q1	15	25	-	<b>4</b>
GEOL1037-2	<i>Analytical mineralogy, Part A</i> - Frédéric HATERT	Q2	10	10	-	<b>2</b>
GEOL0284-1	<i>Geology of Wallonia</i> - AnneChristine DA SILVA - [6d FW]	Q2	20	-	[+]	<b>4</b>
GEOL0268-2	<i>Introduction to Research</i> - Annick ANCEAU, COLLÉGIALITÉ	Q2	20	20	-	<b>5</b>
GEOL0300-1	<i>Structural geology and geomorphology, digital mapping</i> - HansBalder HAVENITH - [3d FW]	Q2	10	20	[+]	<b>3</b>
GEOL1036-1	<i>Metamorphic Petrology</i> - Jacqueline VANDER AUWERA	Q2	15	25	-	<b>3</b>
GEOL0321-1	<i>Sedimentary geochemistry</i> - Nathalie FAGEL	Q2	15	15	-	<b>2</b>
LANG0077-1	<i>English 2 (english language)</i> - Clara BRERETON, Véronique DOPPAGNE	TA	45	-	-	<b>3</b>