

**Block view of the study programme**

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**Block 1**
**Compulsory courses**

GEOL0301-1	<i>Cartography and geomodelling (personnal work)</i> - HansBalder HAVENITH - [15d FW]	Q2	10	30	[+]	<b>10</b>
GEOL0318-1	<i>Scientific writing and communication</i> - Annick ANCEAU, COLLÉGIALITÉ <b>Corequisite :</b> SMEM0021-1 - Mémoire	Q1	-	20	-	<b>3</b>
SMEM0021-1	<i>Final thesis</i> - COLLÉGIALITÉ	TA	-	-	-	<b>17</b>

**Optional courses**

In agreement with the jury, chose courses that haven't already been taken for a total of 30 credits, in at least two different areas, from among:

**Resources and methods**

GEOL0296-1	<i>Clays and environment</i> - Nathalie FAGEL - [1d FW] (Even years)	Q1	15	15	[+]	<b>4</b>
GEOL0020-7	<i>Mineral resources</i> (english language) - Eric PIRARD - [1d FW, 26h Labo., 32h Proj.]	Q1	26	-	[+]	<b>5</b>
GEOL0277-1	<i>Groundwater quality and protection</i> (english language) - Serge BROUYÈRE - [1d FW, 35h Proj.]	Q1	20	20	[+]	<b>5</b>
GEOL0237-2	<i>Exploitation of mineral deposits</i> (english language) - Nicolas VASBINDER - [2d FW]	Q1	25	15	[+]	<b>5</b>
GEOL0021-7	<i>Geophysical prospecting</i> - Frédéric NGUYEN - [5d FW, 20h Proj.]	Q2	26	20	[+]	<b>5</b>
CRIS0204-1	<i>Complement of crystallography</i> - Frédéric HATERT	Q2	15	10	-	<b>3</b>
GEOL1040-1	<i>Metallogeny</i> - Bernard CHARLIER	Q2	15	15	-	<b>4</b>
GEOL0008-2	<i>Hydrocarbons in the energy transition</i> - <i>Energy context and exploration of hydrocarbons</i> - Pierre CORNET - <i>Additional theory and practice</i> - Pierre CORNET	Q1	15	5	-	<b>4</b>
GEOL1041-1	<i>Gemmology and Analytical Mineralogy</i> - Frédéric HATERT	Q1	15	15	-	<b>3</b>
GCIV0620-1	<i>Introduction to geotechnics</i> - <i>Part A</i> - Bertrand FRANÇOIS - [1d FW] - <i>Part B</i>	Q1	20	10	[+]	<b>5</b>
GEOL0313-1	<i>Remediation of contaminated sites</i> (english language) - Serge BROUYÈRE - [2d FW, 40h Proj.]	Q1	24	24	[+]	<b>4</b>
GEOL1050-1	<i>Hydrocarbons in the energy transition: the production of hydrocarbons and reducing greenhouse gas emissions</i> - Xavier LIMPENS (Even years) <b>Corequisite :</b> GEOL0008-2 - Les hydrocarbures dans la transition énergétique	Q1	15	-	-	<b>3</b>
GEOL0225-3	<i>Analytical geochemistry</i> - Nathalie FAGEL - [1d FW] (Odd years)	Q2	10	10	[+]	<b>3</b>
GEOL1046-1	<i>Geothermy</i> (english language) - Alain DASSARGUES, Bertrand FRANÇOIS - [40h Proj., 1d FW]	Q2	18	15	[+]	<b>5</b>

**Evolution of the Earth and the biosphere**

GEOL1049-1	<i>Palaeobiology</i> (english language) - Julien DENAYER, Valentin FISCHER - [2d FW]	Q1	25	15	[+]	<b>4</b>
SPAT0027-3	<i>Climate change and impacts</i> (english language) - Louis FRANÇOIS, Guy MUNHOVEN	TA	30	30	-	<b>5</b>
CLIM0009-1	<i>Biogeochemical cycle modelling and global changes</i> - Louis FRANÇOIS	Q1	20	20	-	<b>4</b>
SPAT0054-1	<i>Astrophysics and astrochemistry</i> - Michaël DE BECKER	Q2	20	-	-	<b>3</b>

GEOL1022-2	<i>Precambrian paleobiogeology</i> - Emmanuelle JAVAUX	Q1	20	10	-	3
GEOL0099-1	<i>Biodiversity and extinctions</i> (english language) - Valentin FISCHER - [2d FW]	Q1	25	-	[+]	3
GEOL0263-1	<i>Astrobiology</i> (english language) - Vincianne DEBAILLE, Véronique DEHANT, Emmanuelle JAVAUX, Yaël NAZÉ, Annick WILMOTTE	Q2	45	-	-	5
GEOL0224-2	<i>Paleoclimatology</i> - Nathalie FAGEL - [1d FW]	Q1	15	15	[+]	3
GEOL1023-1	<i>Palynology - advanced course on Paleozoic spores</i> - Cyrille PRESTIANNI, Philippe STEEMANS (Odd years)	Q2	30	-	-	4

#### Geological processes

GEOL0319-1	<i>Geological hazard and risk assessment, From theory to field work</i> (english language) - HansBalder HAVENITH - [2d FW] (Odd years)	Q2	25	10	[+]	4
GEOL0213-1	<i>Geodynamics</i> - Bernard BINGEN <b>Corequisite :</b> GEOL0209-1 - Géochimie isotopique et géochronologie	Q2	15	-	-	3
GEOG0212-1	<i>Pedology</i> - Gilles COLINET, JeanThomas CORNELIS - Suppl : 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
GEOL0304-1	<i>Introduction to neotectonics, seismology and physical volcanology</i> (english language) - Clara BRERETON, HansBalder HAVENITH - Suppl : Léna CAUCHIE - [2d FW]	Q1	25	15	[+]	4
GEOL0297-1	<i>Diagenesis and dynamics of sedimentary basins</i> - Frédéric BOULVAIN, AnneChristine DA SILVA	Q1	15	15	-	3
GEOL0282-2	<i>Sedimentary and environmental geochemistry</i> - Nathalie FAGEL	Q1	15	15	-	3
GEOL0209-1	<i>Isotopic geochemistry</i> - Jacqueline VANDER AUWERA	Q1	20	10	-	3
GEOL0302-1	<i>Volcanology</i> - Jacqueline VANDER AUWERA (Even years) <b>Corequisite :</b> GEOL0209-1 - Géochimie isotopique et géochronologie	Q2	20	30	-	5
GEOL0223-1	<i>Complement of tectonics</i> - Olivier BOLLE (Even years)	Q2	15	15	-	4
GEOL0303-1	<i>Geomagnetism and environmental magnetism</i> (english language) - AnneChristine DA SILVA (Even years)	Q2	15	5	-	3
GEOL1030-1	<i>Meteoric palaeoweathering</i> - Johan YANS - [1d FW] (Odd years)	Q2	12	12	[+]	3

[...] 1 or 2 course(s) from the courses' programme of the University of Liege

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

### Additonal ECTS (max 60) Master in geology

#### Optional courses

The update course, worth a maximum of 60 credits, will be determined based on students' prior training.

[...] At most 60 credits of courses from "Bachelier en sciences géologiques"