

**Cycle view of the study programme**

		B1	Or	Th	Pr	Au	Cr
<b>Compulsory courses (B1 : 40Cr, B2 : 30Cr)</b>							
GEOL0210-1	<i>Fieldwork in foreign countries</i> - Frédéric BOULVAIN, Nathalie FAGEL, Valentin FISCHER, Frédéric HATERT, HansBalder HAVENITH, Emmanuelle JAVAUX, Jacqueline VANDER AUWERA - Suppl : Camille FRANÇOIS - [10d FW]	B1	Q2	-	-	[+]	6
GEOL0301-1	<i>Cartography and geomodelling (personal work)</i> - HansBalder HAVENITH - [15d FW]	B1	Q2	10	30	[+]	10
GEOL0297-1	<i>Diagenesis and dynamics of sedimentary basins</i> - Frédéric BOULVAIN, AnneChristine DA SILVA	B1	Q2	15	15	-	3
GEOL1022-2	<i>Evolution of the biosphere in the Precambrian</i> - Emmanuelle JAVAUX	B1	Q1	20	10	-	3
GEOL0099-1	<i>Phanerozoic biosphere evolution</i> - Valentin FISCHER - [2d FW] <b>Corequisite :</b> GEOL1022-2 - Evolution de la biosphère précambrienne GEOL0297-1 - Diagenèse et dynamique des bassins sédimentaires	B1	Q1	20	-	[+]	4
GEOL1041-1	<i>Gemmology and Analytical Mineralogy</i> - Frédéric HATERT	B1	Q2	15	15	-	3
GEOL0209-1	<i>Isotopic geochemistry and geochronology</i> - Jacqueline VANDER AUWERA	B1	Q1	20	-	-	3
GEOL0282-1	<i>Sedimentary and environmental geochemistry</i> - Nathalie FAGEL	B1	Q1	20	20	-	4
GEOL0304-1	<i>Introduction to neotectonics, seismology and physical volcanology (english language)</i> - HansBalder HAVENITH - [2d FW]	B1	Q1	25	15	[+]	4
SMEM0022-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	27
GEOL0268-2	<i>Introduction to Research</i> - Annick ANCEAU <b>Corequisite :</b> SMEM0021-1 - Mémoire SMEM0022-1 - Mémoire	B2	Q1	20	20	-	3
<b>Optional courses (B1 : 20Cr, B2 : 30Cr)</b>							
Choose courses, with the approval of the Jury, totalling 20 credits amongst : (B1 : 20Cr)							
<b>Courses held in even years (2016-2017) :</b>							
GEOL0296-1	<i>Clays and environment</i> - Nathalie FAGEL (Even years)	B1	Q1	15	15	-	4
GEOL0263-1	<i>Astrobiology</i> - Philippe CLAEYS, Véronique DEHANT, Moreno GALLEN, Emmanuelle JAVAUX, Yaël NAZÉ, Annick WILMOTTE (Even years)	B1	Q2	30	15	-	5
GEOL0302-1	<i>Volcanology</i> - Jacqueline VANDER AUWERA (Even years) <b>Corequisite :</b> GEOL0209-1 - Géochimie isotopique et géochronologie	B1	Q2	20	30	-	5
GEOL0223-1	<i>Complement of tectonics</i> - Olivier BOLLE (Even years)	B1	Q2	15	15	-	4
GEOL0306-1	<i>Techniques for extracting non-conventional hydrocarbons</i> - Xavier LIMPENS (Even years) <b>Corequisite :</b> GEOL0307-1 - Géologie des hydrocarbures	B1	Q1	15	-	-	3
GEOL0303-1	<i>Geomagnetism and environmental magnetism (english language)</i> - AnneChristine DA SILVA (Even years)	B1	Q2	15	5	-	3
<b>Courses held in odd years (2015-2016) :</b>							
GEOL0224-2	<i>Paleoclimatology</i> - Nathalie FAGEL - [1d FW] (Odd years)	B1	Q1	15	15	[+]	4
GEOL1023-1	<i>Palynology - advanced course on Paleozoic spores</i> - Philippe STEEMANS (Odd years)	B1	Q2	30	-	-	4
GEOL0220-1	<i>Cainozoic Stratigraphy</i> - Emile ROCHE (Odd years)	B1	Q1	15	-	-	3

GEOL1030-1	<i>Meteoric palaeoweathering</i> - Johan YANS - [1d FW] (Odd years)	B1	Q2	12	12	[+]	3
<b>Courses organised every year</b>							
GEOL0305-2	<i>Paleoecology</i> - N... - [1d FW]	B1	Q1	20	-	[+]	3
GEOL0221-1	<i>Quaternary Palynology</i> - Mona COURTPICON	B1	Q2	15	15	-	4
GEOG0212-1	<i>Pedology</i> - Gilles COLINET - [1d FW]	B1	Q2	15	8	[+]	3
SPAT0027-4	<i>Climate change and impacts</i> - Louis FRANÇOIS, Guy MUNHOVEN	B1	TA	15	15	-	4
CLIM0009-1	<i>Biogeochemical cycle modelling and global changes</i> - Louis FRANÇOIS	B1	Q1	20	20	-	4
SPAT0054-1	<i>Astrophysics and astrochemistry</i> - Michaël DE BECKER	B1	Q2	15	5	-	3
GEOL1039-2	<i>geological oceanography</i> - Nathalie FAGEL - [1d FW]	B1	Q1	20	20	[+]	4
GEOL0225-3	<i>Analytical Geochemistry</i> - Nathalie FAGEL	B1	Q1	10	10	-	3
GEOL0256-1	<i>Geochemistry of sediments and interstitial water</i> - Nathalie FAGEL	B1	Q1	15	15	-	4
GEOL0213-1	<i>Geodynamics</i> - Bernard BINGEN	B1	Q2	15	-	-	3
<b>Corequisite :</b> GEOL0209-1 - Géochimie isotopique et géochronologie							
CRIS0204-1	<i>Complement of crystallography</i> - Frédéric HATERT	B1	Q2	15	-	-	3
GEOL0254-1	<i>Gravimetrics, magnetism, and their geological applications</i> - Michel EVERAERTS	B1	Q2	15	15	-	4
GCIV0620-1	<i>Introduction to geotechnics</i> - Robert CHARLIER - [1d FW]	B1	Q1	30	20	[+]	5
GEOL0020-7	<i>Mineral resources</i> (english language) - Eric PIRARD - [1d FW, 30h Labo., 32h Proj.]	B1	Q1	30	-	[+]	5
MINE0005-1	<i>Mine and Quarry Working</i> - Eric POOT	B1	Q2	20	-	-	3
GEOL0313-1	<i>Remediation of contaminated sites</i> - Serge BROUYÈRE - [2d FW, 40h Proj.]	B1	Q1	24	24	[+]	4
GEOL0023-2	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [3d FW]	B1	Q1	25	25	[+]	5
GEOL1021-1	<i>Introduction to geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5d FW]	B1	Q2	30	30	[+]	6
GEOL0277-1	<i>Groundwater quality and protection</i> - Serge BROUYÈRE - [1d FW, 35h Proj.]	B1	Q1	20	20	[+]	5
GEOL0083-3	<i>Groundwater modelling</i> (english language) - Alain DASSARGUES - [30h Labo., 30h Proj.]	B1	Q1	30	-	[+]	5
GEOL0307-1	<i>Geology of hydrocarbons</i> - Pierre CORNET	B1	Q1	20	20	-	4
<b>Corequisite :</b> GEOL0306-1 - Techniques d'extraction des hydrocarbures non conventionnels							
SPOL2209-3	<i>Environmental and land policies</i> - Sophie HANSON	B1	Q1	30	-	-	3
GEOL0308-1	<i>Environmental geology related to renewable energy resources and mining</i> (english language) - HansBalder HAVENITH - [1d FW]	B1	Q2	20	10	[+]	3
<b>Corequisite :</b> GEOL0309-1 - Assessment of geological risk							
GEOL0309-1	<i>Assessment of geological risk</i> (english language) - HansBalder HAVENITH - [3d FW]	B1	Q1	30	15	[+]	4
GEOL0236-2	<i>Remote sensing and geological imaging</i> - Eric PIRARD - [50h Proj.]	B1	Q1	30	10	[+]	5
GEOL1028-1	<i>Site investigation</i> - Serge BROUYÈRE, Frédéric NGUYEN - [5d FW, 60h Proj.]	B1	Q2	12	-	[+]	3
GEOL1040-1	<i>Metallogeny</i> - Bernard CHARLIER	B1	Q2	15	15	-	3
DOCU0455-1	<i>Introduction to critical thinking</i> - Yaël NAZÉ	B1	Q1	10	5	-	2

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

**Single focus (B2 : 1Nbr)**

**Research Focus (B2 : 30Cr)**

SSTG0011-1 *Placement* - Valentin FISCHER - [4w Internship] B2 Q2 - - [+] 10

Choose courses, with the approval of the Jury, totalling 20 credits among : (B2 : 20Cr)

[...] Choose additional courses not previously followed and totaling from 11 to 20 ECTS from the courses programme of the ULg

[...] Maximum 9 ECTS can be chosen in the courses' programme of another university

**Programme transitoire à destination des étudiants ayant réussi leur master 1 de "Master en sciences géologiques, à finalité approfondie" en 2014-2015**

**Optional courses (B1 : 30Cr)**

**Follow-up to the focus chosen in first year (B1 : 30Cr)**

**Research Focus (B1 : 30Cr)**

SSTG0011-1 *Placement* - Valentin FISCHER - [4w Internship] B1 Q2 - - [+] 10

With the approval of the Jury, choose courses totalling 20 ECTS from : (B1 : 20Cr)

[...] Choose additional courses not previously followed and totaling from 11 to 20 ECTS from the courses programme of the ULg

[...] Maximum 9 ECTS can be chosen in the courses' programme of another university

**Compulsory courses (B1 : 30Cr)**

SMEM0022-1 *Final thesis* - COLLÉGIALITÉ B1 TA - - - 27

GEOL0268-2 *Introduction to Research* - Annick ANCEAU B1 Q1 20 20 - 3