

## First Year

### Compulsory courses

CHIM0004-3	<i>Analytical chemistry</i> - Gauthier EPPE	30	30	-	5
GEOL0289-1	<i>Determinative mineralogy</i> - André-Mathieu FRANSOLET	20	20	-	3
GEOL0006-1	<i>Rocks and sedimentary processes</i> - Frédéric BOULVAIN - [1d FW]	30	-	[+]	3
GEOL0279-1	<i>Geological mapping</i> - Hans-Balder HAVENITH - [4d FW]	20	20	[+]	5
GEOL0029-4	<i>Tectonics</i> - Olivier BOLLE - [2d FW]	15	15	[+]	3
GEOL0284-1	<i>Geology of Wallonia</i> - Frédéric BOULVAIN - [6d FW]	20	-	[+]	3
GCIV0184-4	<i>Building Materials</i> - Luc COURARD - [1d FW]	20	20	[+]	3
GCIV0185-3	<i>Numerical methods in Civil and Geological Engineering - I. Linear methods, Linear methods</i> - Vincent DENOËL, Michel PIROTON	30	30	-	5
GEOL0097-1	<i>Geostatistics</i> - Eric PIRARD	20	20	-	3
GEOL0260-2	<i>Applied geophysics</i> - Frédéric NGUYEN - [2d FW]	20	20	[+]	5
GEOL0083-3	<i>Groundwater Modelling</i> - Alain DASSARGUES	30	30	-	5
GCIV0045-4	<i>Rock mechanics, tunnels, rock slopes, rock foundations</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
GEOL0277-1	<i>Soil and groundwater quality, protections and remediation</i> - Serge BROUYÈRE - [1d FW]	30	30	[+]	5
GEOL0237-2	<i>Exploiting deposits, quarries and mines - N... - Suppl : Jacques TACK - [1d FW]</i>	20	10	[+]	2
GCIV0090-2	<i>Introduction to free surface flows</i> - Michel PIROTON	15	10	-	2
GEOL0276-4	<i>Solid waste processing</i> - Stoyan GAYDARDZHIEV - [1,5d FW]	20	20	[+]	3

*Notice* : Students who have, in their BAC studies, already taken one or more compulsory courses in this Master's programme are obliged to replace them by other courses in this Masters programme or courses in the programme of the Applied Sciences Faculty or of the Sciences Faculty ; this choice must be approved by the President of the cycle's Jury.

### Compulsory courses

GEOL0274-1	<i>Introduction to mineralogy, igneous and metamorphic petrology</i> - André-Mathieu FRANSOLET, Jacqueline VANDER AUWERA	30	30	-	4
GEOL0275-1	<i>Introduction to paleontology</i> - Emmanuelle JAVAUX	10	10	-	2
GEOL0021-7	<i>Geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5d FW]	30	30	[+]	5
GEOL0020-5	<i>Mineral resources</i> - Eric PIRARD	20	10	-	3
GEOL0249-2	<i>Personal project work in documentary research</i> - Annick ANCEAU, Eric PIRARD	5	25	-	3
GEOL0013-5	<i>Hydrogeology</i> - Alain DASSARGUES - [1d FW]	30	30	[+]	5
GCIV0603-2	<i>Geotechnics and infrastructure</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
META0431-2	<i>Mineral processing (processes)</i> - Stoyan GAYDARDZHIEV - [1d FW]	30	30	[+]	3
CHIM0004-3	<i>Analytical chemistry</i> - Gauthier EPPE	30	30	-	5
GEOL0289-1	<i>Determinative mineralogy</i> - André-Mathieu FRANSOLET	20	20	-	3
GEOL0290-1	<i>Introduction to sedimentary petrology</i> - Frédéric BOULVAIN - [1d FW]	30	-	[+]	3
GEOL0279-1	<i>Geological mapping</i> - Hans-Balder HAVENITH - [4d FW]	20	20	[+]	5
GEOL0023-4	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [2d FW]	10	30	[+]	5
GCIV0045-4	<i>Rock mechanics, tunnels, rock slopes, rock foundations</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
GEOL0237-2	<i>Exploiting deposits, quarries and mines - N... - Suppl : Jacques TACK - [1d FW]</i>	20	10	[+]	2
BIOL0212-1	<i>Introduction to environmental microbiology</i> - Monique CARNOL	30	-	-	2

### Compulsory courses

MATH0006-1	<i>Introduction to numerical analysis</i> - Quentin LOUVEAUX	30	30	-	5
MECA0001-1	<i>Mechanics of materials</i> - Anne HABRAKEN, Jean-Pierre JASPART	30	30	-	5
MECA0011-1	<i>Fluid Mechanics : Basics</i> - Michel PIROTON	30	30	-	4
GEOL0021-7	<i>Geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5d FW]	30	30	[+]	5
GEOL0020-3	<i>Mineral resources</i> - Eric PIRARD	20	20	-	3
GEOL0249-2	<i>Personal project work in documentary research</i> - Annick ANCEAU, Eric PIRARD	5	25	-	3
GCIV0603-2	<i>Geotechnics and infrastructure</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
META0431-2	<i>Mineral processing (processes)</i> - Stoyan GAYDARDZHIEV - [1d FW]	30	30	[+]	5
GCIV0184-4	<i>Building Materials</i> - Luc COURARD - [1d FW]	20	20	[+]	3
GCIV0185-3	<i>Numerical methods in Civil and Geological Engineering - I. Linear methods, Linear methods</i> - Vincent DENOËL, Michel PIROTON	30	30	-	5

GEOL0097-1	<i>Geostatistics</i> - Eric PIRARD	20	20	-	3
GEOL0260-2	<i>Applied geophysics</i> - Frédéric NGUYEN - [2d FW]	20	20	[+]	5
GEOL0023-4	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [2d FW]	10	30	[+]	4
GCIV0045-4	<i>Rock mechanics, tunnels, rock slopes, rock foundations</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
GEOL0277-1	<i>Soil and groundwater quality, protections and remediation</i> - Serge BROUYÈRE - [1d FW]	30	30	[+]	5
GEOL0237-2	<i>Exploiting deposits, quarries and mines</i> - N... - Suppl : Jacques TACK - [1d FW]	20	10	[+]	2
GEOL0276-4	<i>Solid waste processing</i> - Stoyan GAYDARDZHIEV - [1,5d FW]	20	20	[+]	3

#### Compulsory courses

MATH0006-1	<i>Introduction to numerical analysis</i> - Quentin LOUVEAUX	30	30	-	5
GEOL0021-7	<i>Geophysical exploration</i> - Lucien HALLEUX, Frédéric NGUYEN - [5d FW]	30	30	[+]	4
MECA0001-1	<i>Mechanics of materials</i> - Anne HABRAKEN, Jean-Pierre JASPART	30	30	-	5
MECA0011-1	<i>Fluid Mechanics : Basics</i> - Michel PIROTON	30	30	-	4
GEOL0020-3	<i>Mineral resources</i> - Eric PIRARD	20	20	-	3
GEOL0249-2	<i>Personal project work in documentary research</i> - Annick ANCEAU, Eric PIRARD	5	25	-	3
GCIV0603-2	<i>Geotechnics and infrastructure</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
META0431-2	<i>Mineral processing (processes)</i> - Stoyan GAYDARDZHIEV - [1d FW]	30	30	[+]	5
GCIV0184-4	<i>Building Materials</i> - Luc COURARD - [1d FW]	20	20	[+]	3
GCIV0185-3	<i>Numerical methods in Civil and Geological Engineering - I. Linear methods, Linear methods</i> - Vincent DENOËL, Michel PIROTON	30	30	-	5
GEOL0097-1	<i>Geostatistics</i> - Eric PIRARD	20	20	-	3
GEOL0260-2	<i>Applied geophysics</i> - Frédéric NGUYEN - [2d FW]	20	20	[+]	5
GEOL0023-4	<i>Engineering geology (integrated project)</i> - Frédéric NGUYEN - [2d FW]	10	30	[+]	4
GCIV0045-4	<i>Rock mechanics, tunnels, rock slopes, rock foundations</i> - Robert CHARLIER - [1d FW]	30	30	[+]	5
GEOL0277-1	<i>Soil and groundwater quality, protections and remediation</i> - Serge BROUYÈRE - [1d FW]	30	30	[+]	5
GEOL0237-2	<i>Exploiting deposits, quarries and mines</i> - N... - Suppl : Jacques TACK - [1d FW]	20	10	[+]	2
GEOL0276-4	<i>Solid waste processing</i> - Stoyan GAYDARDZHIEV - [1,5d FW]	20	20	[+]	3

#### Second Year

##### Compulsory courses

GEOL0234-3	<i>Modelling and inversion in geophysics</i> - Frédéric NGUYEN	20	20	-	3
GEOL0236-2	<i>Remote sensing and geological imaging</i> - COLLÉGIALITÉ, Eric PIRARD	30	30	-	5
GEOL0008-1	<i>Origin and production of hydrocarbons</i> - Pierre CORNET, Xavier LIMPENS	30	-	-	2
ATFE0011-1	<i>Final Work (including an introduction to methodology and research)</i> - COLLÉGIALITÉ	-	-	-	20

Final year trip: at the beginning of the academic year, prior to the organisation of the courses, guided tours to companies, geological sites (optional).

##### Compulsory courses

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	4
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	24	-	-	2
GEST3003-1	<i>Competitive strategy in the marketplace (english language)</i> - Michael GHILISSEN	16	16	-	3
GEST3004-1	<i>Marketing (operations and management) (english language)</i> - Michael GHILISSEN	16	16	-	3
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	4
GEST3006-1	<i>Operations and supply chain management I</i> - Yasemin ARDA	16	16	-	3
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ	-	30	-	4
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	4

##### Optional courses

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	16	16	-	3
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	16	16	-	3
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	3