

Cycle view of the study programme

B1 Or Th Pr Au Cr

Compulsory courses (B1 : 20Cr, B2 : 34Cr)

Periods 1 and 2

STE1.10 Core curriculum 1

GERE0015-1	<i>Group project</i> - JeanThomas CORNELIS - Suppl : Marie DINCHER - [180h AUTR]	B1	Q1	4	-	[+]	6
HYDR0012-1	<i>Fluid transport and distribution</i> (english language) - Joost WELLENS Corequisite : LANG2956-1 - Pratique de l'anglais de spécialité en Sciences et Technologies de l'environnement : partie 1 (niveau B2+)	B1	Q1	11	10	-	2
ENVT0045-1	<i>Geomatics and applied remote sensing</i> - JeanFrançois BASTIN, Philippe LEJEUNE	B1	Q1	24	33	-	6
GEP0003-2	<i>Pedogenesis, international referential of classification and soil hydrodynamics</i> - JeanThomas CORNELIS, Aurore DEGRÉ - Suppl : Marie DINCHER - [6h FT] Corequisite : LANG2956-1 - Pratique de l'anglais de spécialité en Sciences et Technologies de l'environnement : partie 1 (niveau B2+)	B1	Q1	31	26	[+]	6

STE2. Environmental law

DROI1306-1	<i>Environmental law</i> - Martin LAUWERS, Renaud SMAL	B2	Q1	18	-	-	2
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Periods 3 and 4

STE2.31 Final work and internship

RSTG0003-1	<i>Internship and professional relations</i> - Catherine COLAUX, Thomas DOGOT, Didier VAN CAILLIE, Joost WELLENS	B2	TA	12	-	-	8
RTFE2002-1	<i>Thesis in education environmental sciences and technologies</i> - Catherine CHARLES	B2	Q2	-	-	-	24

Optional courses (B1 : 40Cr, B2 : 26Cr)

Single focus (B1 : 30Cr)

Professional Focus (B1 : 30Cr)

Periods 1 and 2

STE1.10 Core curriculum 1

STAT1213-1	<i>Multivariate analysis I: data exploration and structuring</i> - Yves BROSTAUX	B1	Q1	9	9	-	2
GERE0019-1	<i>Grounds mechanic and geotechnology</i> - Frédéric COLLIN, Bertrand FRANÇOIS	B1	Q1	21	21	-	4
INGE0004-2	<i>Construction processes</i> - JeanFrançois RONDEAUX - [4h FT]	B1	Q1	20	12	[+]	3

STE1.10 Core curriculum 2

MANA0004-1	<i>Portfolio (Master)</i> - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Marianne SINDIC - [24h AUTR]	B1	Q2	-	-	[+]	2
LANG2956-1	<i>Practice of specialized English in environment sciences and technologies : Part 1 (level B2+)</i> - Sophie DEPOTERRE, Estelle MAYARD - Suppl : Annabel FOREST, Fiona THEWISSEN - [36h AUTR] Corequisite : HYDR0012-1 - Fluid transport and distribution GERE0037-1 - Modélisation des transferts dans les biosystèmes	B1	Q2	-	12	[+]	4

GEOP0003-2 - Pédogenèse, référentiels internationaux de classification et hydrodynamique des sols

Period 3

STE1.10 Core curriculum 3

GERE0037-1	<i>Modelling of transfers in biosystems</i> - Aurore DEGRÉ, Bernard LONGDOZ, Benoît MERCATORIS Corequisite : LANG2956-1 - Pratique de l'anglais de spécialité en Sciences et Technologies de l'environnement : partie 1 (niveau B2+)	B1	Q2	20	37	-	6
GEOP0010-1	<i>Soil quality evaluation</i> - Gilles COLINET	B1	Q2	14	13	-	3
GERE0038-1	<i>Energy systems and renewable energies</i> - Frédéric LEBEAU	B1	Q2	18	18	-	4

Period 4

STE1.45 Field applications and visits

GERE0039-1	<i>Field applications and visits</i> - Gilles COLINET, Jeroen MEERSMANS - [23h FT]	B1	Q2	1	-	[+]	2
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Choose one module totalling 6 credits from : (B1 : 1Nbr)

STE1.41 Spatial analysis, soil organisation in the landscape and soil conservation (B1 : 6Nbr)

GERE0023-1	<i>Spatial analysis, organisation of grounds in the landscape and preservation of grounds</i> - Gilles COLINET, Aurore DEGRÉ, Jeroen MEERSMANS - [8h FT] Corequisite : LANG2956-1 - Pratique de l'anglais de spécialité en Sciences et Technologies de l'environnement : partie 1 (niveau B2+) GEOP0003-2 - Pédogenèse, référentiels internationaux de classification et hydrodynamique des sols	B1	Q2	23	23	[+]	6
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STE1.42 Theory of structural calculations (B1 : 6Nbr)

GERE0021-1	<i>Theory of structural calculations</i> - Laurent DUCHENE, JeanMarc FRANSSSEN	B1	Q2	29	28	-	6
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Choose one module totalling 4 credits from : (B1 : 1Nbr)

STE1.43 Irrigation (B1 : 4Cr)

HYDR0015-1	<i>Irrigation (english language)</i> - Joost WELLENS - [3h FT] Corequisite : LANG2956-1 - Pratique de l'anglais de spécialité en Sciences et Technologies de l'environnement : partie 1 (niveau B2+)	B1	Q2	13	20	[+]	4
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STE1.44 Rural engineering technologies (B1 : 4Cr)

GERE0028-2	<i>Building physics and special techniques</i> - Frédéric LEBEAU - [3h AUTR]	B1	Q2	9	6	[+]	2
GERE0007-3	<i>Digital electronics</i> - Bernard HEINESCH	B1	Q2	16	8	-	2

Periods 1 and 2

Choose courses totalling 4 ECTS from the following : (B2 : 4Cr)

STE 2.12 Environmental Techniques and Data Mining

CHIM9248-1	<i>Wastewater engineering (english language)</i> - Frank DELVIGNE	B2	Q1	18	-	-	2
GEST3020-1	<i>Conceiving and economic assessment of project : food crop and agroforestry</i> - Baudouin MICHEL - [9h SEM]	B2	Q1	9	-	[+]	2
ENVT2053-1	<i>Waste management</i> - Luc MINNE - [4h FT]	B2	Q1	14	-	[+]	2
INFO8008-1	<i>Multivaried analysis 2: data mining and machine learning (english language)</i> - Yves BROSTAU, Juan Antonio FERNANDEZ PIERNA, Hélène SOYEURT	B2	Q1	12	26	-	4

Prerequisite :

STAT1213-1 - Analyse multivariée 1 : exploration et structuration de données

Choose one module totalling 6 credits from : (B2 : 1Nbr)

STE 2.13 Practical evaluation of grounds and water resources (B2 : 6Cr)

GERE0025-1	<i>Practical evaluation of grounds and water resources</i> - Gilles COLINET, Aurore DEGRÉ, Jeroen MEERSMANS, Youri ROTHFUSS - [19h AUTR]	B2	Q1	19	19	[+]	6
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Prerequisite :

GEOP0010-1 - Evaluation de la qualité des sols

STE2.14 Automation in agriculture (B2 : 6Cr)

GERE0026-1	<i>Automatic</i> - Benoît MERCATORIS - [6h AUTR]	B2	Q1	6	6	[+]	2
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GERE0027-1	<i>Microcontrollers Base</i> - Bernard HEINESCH - [6h AUTR]	B2	Q1	3	15	[+]	2
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GERE0024-1	<i>Digital eco-design</i> - Frédéric LEBEAU	B2	Q1	12	12	-	2
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Choose one module totalling 6 credits from : (B2 : 1Nbr)

STE2.15 Environmental remediation (B2 : 6Cr)

ENVT2049-2	<i>Introduction to environmental assessment</i> - Angélique LÉONARD - [9h AUTR]	B2	Q1	9	-	[+]	2
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ECON2248-1	<i>Environmental economy</i> - Kevin MARÉCHAL	B2	Q1	18	-	-	2
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GERE0029-1	<i>Ground remediation</i> - Gilles COLINET - [10h FT]	B2	Q1	6	8	[+]	2
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STE2.16 Precision agriculture (B2 : 6Cr)

GERE0030-1	<i>Image analysis</i> (english language) - Vincent LEEMANS	B2	Q1	9	9	-	2
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GERE0031-1	<i>Support systems for decision</i> (english language) - Vincent LEEMANS - [6h AUTR]	B2	Q1	6	6	[+]	2
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Prerequisite :

STAT1213-1 - Analyse multivariée 1 : exploration et structuration de données

GERE0032-1	<i>Robotic applications</i> - Benoît MERCATORIS	B2	Q1	9	9	-	2
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Corequisite :

GERE0026-1 - Automatique

GERE0027-1 - Base des microcontrôleurs

Choose one module totalling 6 credits from : (B2 : 1Nbr)

GFEN 2.17 Very high-resolution remote sensing applied to the management of natural environments (B2 : 6Cr)

ENVT3060-1	<i>Very high resolution remote sensing applied to the management of natural environments</i> - Philippe LEJEUNE	B2	Q1	18	36	-	6
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Prerequisite :

ENVT0045-1 - Géomatique et télédétection appliquée

STE2.18 Ecosystem exchanges - atmosphere, under climate change (B2 : 6Cr)

GERE0034-1	<i>Exchanges between the ecosystem and the atmosphere as a result of climate change</i> - Bernard HEINESCH, Bernard LONGDOZ, Youri ROTHFUSS - [3h AUTR]	B2	Q1	14	40	[+]	6
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STE2.19 Integrated project on hydrogeophysics (B2 : 6Cr)

GERE0035-1	<i>Integrated project on hydrogeophysics</i> (english language) - Frédéric NGUYEN	B2	Q1	4	38	-	6
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STE2.20 Controlled environment agriculture (B2 : 6Cr)

GERE0033-1	<i>Controlled environment agriculture</i> - Frédéric LEBEAU	B2	Q1	9	27	-	6
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Choose a language module from : (B2 : 4Cr)

Periods 3 and 4

STE 2.31 English language (B2 : 4Cr)

LANG2957-1	<i>Practice of specialized english in sciences and environmental technologies : part 2 (level C1 - presentation)</i> - Sophie DEPOTERRE, Estelle MAYARD - Suppl : Annabel FOREST, Fiona THEWISSEN - [36h AUTR]	B2	TA	-	12	[+]	4
	Corequisite : RTFE2002-1 - Travail de fin d'études en sciences et technologies de l'environnement						

All year round

STE 2.32 Dutch language (B2 : 4Cr)

LANG9914-1	<i>Dutch - intermediate</i> - Catherine PEETERS	B2	TA	18	18	-	4
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STE 2.33 Spanish language (B2 : 4Cr)

LANG9915-1	<i>Spanish - beginners</i> - Valérie COYETTE	B2	TA	18	18	-	4
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Possibility (via the student affairs office) to choose between 2 and 6 ECTS among the following courses, replacing the B2 elective courses:

ENVT3050-1	<i>Quantification of ecosystem services</i> - Marc DUFRÈNE - [6h AUTR]	B2	Q1	9	5	[+]	2
BIOD0001-3	<i>Biodiversity management</i> - Arnaud MONTY - [6h SEM]	B2	Q1	18	-	[+]	2
VEGE0037-1	<i>Innovative system of plant production</i> - <i>Urban agriculture</i> - Haïssam JIJAKLI - <i>Developmental physiology applied to plant productions</i> - Pierre DELAPLACE - [6h FT] - <i>Physical parameters control of plant productions in controlled conditions</i> - Vincent LEEMANS	B2	Q2	13	13	-	6
				12	-	[+]	
				9	-	-	
VEGE0028-1	<i>Methods for managing plant health</i> - Frédéric FRANCIS, Olivier GUELTON, Eric HAUBRUGE, Haïssam JIJAKLI, Ludivine LASSOIS, Sébastien MASSART, François VERHEGGEN	B2	Q2	42	15	-	6
VEGE0036-1	<i>Tropical agroecology</i> - <i>Introduction</i> - Ludivine LASSOIS - [20h FT] - <i>Depth notions</i> - Ludivine LASSOIS	B2	Q2	-	-	[+]	6
				16	21	-	
CHIM9321-1	<i>Immunology</i> - Benjamin G. DEWALS, Laurent GILLET, Alain VANDERPLASSCHEN, Hervé VANDERSCHUREN	B2	Q1	33	-	-	4
ALIM0015-1	<i>Food sanitary safety</i> - Mohamed AYADI, Marianne SINDIC - [2h SEM]	B2	Q1	16	6	[+]	2
ALIM0013-2	<i>Techniques of food preservation</i> - Christophe BLECKER	B2	Q2	24	-	-	2
BIOL2015-3	<i>Molecular biology</i> - Luc WILLEMS	B2	Q2	24	-	-	2

Optional activities (B1 : 14Cr, B2 : 4Cr)

RSTG0011-1	<i>Additional internship</i> - N...	B1	TA	-	-	-	5
HULG9547-1	<i>French course for IN mobility students (S1)</i> - N...	B1	Q1	-	-	-	3
HULG9548-1	<i>French course for IN mobility students (S2)</i> - N...	B1	Q2	-	-	-	3
HULG9546-1	<i>Erasmus: integration weeks</i> - N...	B1	Q1	-	-	-	3
INFO9013-1	<i>Multivaried analysis 3: Data mining et Machine Learning: advanced (english language)</i> - Yves BROSTAUX, David COLIGNON, Benoît MERCATORIS, Hélène SOYEURT	B2	Q2	12	28	-	4
	<i>Notice :</i> INFO8001-1 prerequisite of the INFO9013-1 course						

Additional ECTS Master in environmental bioengineering

Compulsory courses (B0 : 58Cr)

GEST3028-2	<i>Accounting and management</i> - <i>General accounting</i> - Thomas DOGOT, Philippe LEBAILLY - <i>Management, green accounting and business plan</i> - Thomas DOGOT, Philippe LEBAILLY	B0	Q1	12	12	-			4
GEST3773-1	<i>Management of quality</i> - Mohamed AYADI, Sébastien MASSART - [6h AUTR]	B0	Q1	18	-		[+]		2
STAT2004-1	<i>Applied statistics : First part</i> - Yves BROSTAUX	B0	Q1	12	12	-			2
STAT2005-1	<i>Applied statistic : Second part</i> - Yves BROSTAUX Corequisite : STAT2004-1 - Statistique appliquée : 1ère partie	B0	Q2	12	12	-			2
PSYC5897-3	<i>Team, organization and change</i> - Daniel FAULX, Véronique JANS, Tiber MANFREDINI - [44h SEM] Corequisite : GEST3028-2 - Comptabilité et gestion des entreprises GEST3773-1 - Gestion de la qualité MANA0003-1 - Portfolio (Bachelier)	B0	TA	4	-		[+]		2
MANA0003-1	<i>Portfolio (Bachelor)</i> - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Marianne SINDIC - [24h AUTR] Corequisite : PSYC5897-3 - Equipe, organisation & changement	B0	TA	-	-		[+]		2
RSTG0008-1	<i>Internship (Bachelor)</i> - Hélène SOYEURT - [18h AUTR] Corequisite : GEST3773-1 - Gestion de la qualité GEST3028-2 - Comptabilité et gestion des entreprises PSYC5897-3 - Equipe, organisation & changement	B0	TA	6	-		[+]		2
BIOL2044-1	<i>Plant physiology</i> - Patrick DU JARDIN	B0	Q1	27	9	-			3
BIOL2013-2	<i>General microbiology</i> - Patrick FICKERS, Philippe JACQUES	B0	Q1	16	8	-			2
ENVT2044-1	<i>General ecology</i> - Grégory MAHY, Arnaud MONTY	B0	Q1	24	-	-			2
INFO2038-1	<i>Computer science and algorithmic</i> - Hélène SOYEURT	B0	Q1	2	22	-			2
MATH2016-1	<i>General mathematics and modelling of dynamics systems</i> - Jérôme BINDELLE, Catherine CHARLES, Frank DELVIGNE, Adeline FAYOLLE, Benoît MERCATORIS	B0	Q1	24	24	-			4
PHYS3036-1	<i>Environmental physics</i> - Bernard LONGDOZ	B0	Q1	18	18	-			3
LANG2966-2	<i>English language: level 3</i> - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Ivan DOSEN, Annabel FOREST - [48h E-Lrng]	B0	TA	-	24		[+]		4
INGE0008-1	<i>Multidisciplinary experimental project</i> - Yves BROSTAUX, Pierre DELAPLACE, Sébastien MASSART, Benoît MERCATORIS, Arnaud MONTY, Bernard POCHET - [60h AUTR] Corequisite : STAT2005-1 - Statistique appliquée : 2ème partie STAT2004-1 - Statistique appliquée : 1ère partie GEST3773-1 - Gestion de la qualité BIOL2044-1 - Physiologie végétale ENVT2044-1 - Ecologie générale	B0	TA	6	6		[+]		6

Option Environmental Bioengineering

GEOP0002-2	<i>Edaphology</i> - Aurore DEGRÉ	B0	Q2	18	6	-			2
GEOP0011-1	<i>Edaphology - In-depth study</i> - Aurore DEGRÉ, Youri ROTHFUSS	B0	Q2	5	5	-			1
GERE0036-1	<i>Environmental metrology</i> - Benoît MERCATORIS Corequisite :	B0	Q2	24	24	-			4

MATH2016-1 - Mathématique générale et modélisation des systèmes dynamiques

HYDR0001-1	<i>General hydrology</i> - Aurore DEGRÉ	B0	Q2	14	10	-	2
HYDR0007-3	<i>Fluid mechanics</i> - Michel PIROTTON	B0	Q2	14	10	-	2
INGE0001-2	<i>Strength of materials and elasticity</i> - <i>Introduction</i> - Laurent DUCHENE - <i>In-depth study</i> - Laurent DUCHENE	B0	Q2	24	-	-	3
PHYS3010-2	<i>Bioclimatology basis</i> - Bernard LONGDOZ	B0	Q2	24	-	-	2

Option cours (B0 : 2Cr)

Select 1 course from Environmental sciences and technologies subject : (B0 : 1Nbr)

AGRO0001-1	<i>Basic principles of agriculture and agroecology</i> - Benjamin DUMONT , Ludivine LASSOIS - [4h FT]	B0	Q2	20	-	[+]	2
INGE0002-1	<i>Refrigeration and drying</i> - Nicolas JACQUET, Paul MALUMBA KAMBA	B0	Q2	18	6	-	2