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First Year

First semester
Period 1

Compulsory courses

STE1.11 Fluid mechanics

HYDR0007-4 *Fluid mechanics* - Charles DEBOUCHE 14 16 - 3

STE1.12 Soil, geotechnics and metrology

GERE0008-3 *Soil mechanics and geotechnics, part 1* - Robert CHARLIER, Frédéric COLLIN 12 12 - 2

GERE0006-4 *Environmental metrology, part 1* - MarieFrance DESTAIN, Benoît MERCATORIS 12 12 - 2

HYDR0006-2 *Modelling of transfers in soils, 1st part* - Aurore DEGRÉ 12 12 - 2

Period 2

Compulsory courses

STE1.21 Group project

GERE0015-1 *Group project* - Marc AUBINET, COLLÉGIALITÉ - - - 6

STE1.22 Statistical analysis, geotechnics and metrology

GERE0006-5 *Environmental metrology, part 2* - MarieFrance DESTAIN, Benoît MERCATORIS 12 12 - 2

GERE0008-4 *Soil mechanics and geotechnics, part 2* - Robert CHARLIER, Frédéric COLLIN 12 12 - 2

STAT1213-1 *Multivariate statistical analysis* - Yves BROSTAUX 12 12 - 2

Optional courses

Choose one module from :

STE1.23 Machinery and constructions 1/2

GERE0016-1 *Machine elements, 1st part* - MarieFrance DESTAIN 18 18 - 3

GERE0003-2 *Theory of structural calculations, 1st part* - Pierre LATTEUR - Suppl : Vincent DENOËL, JeanMarc FRANSSSEN 36 - - 3

STE1.24 Environmental management

ENVT2049-2 *Introduction to environmental assessment* - Charles DEBOUCHE 12 - - 2

HYDR0011-2 *Ecohydrology* - Aurore DEGRÉ - [12h FT] 6 - [+] 2

GESA0001-2 *Chemical and physico-chemical analysis of waters* - JeanPaul BARTHELEMY 8 16 - 2

Second semester

Period 3

Optional courses

Choose one group of modules from "Elements of rural engineering + Machinery and construction 2/2" or "Soil components and environmental quality (module 1 + 2) :

Notice : if the module "Machinery and construction 1/2" is chosen during the 1st period, then the modules "Elements of rural engineering" and "Machinery and construction 2/2" are compulsory.

if the module "Environmental management" is chosen during the 2nd period, then the modules "Soil components and environmental quality" are compulsory.

Elements of rural engineering and construction engineering 2/2

Requisite

"STE1.23 Machines et constructions 1/2"

STE1.31 Element of rural engineering

HYDR0010-1 *Open channel hydraulics* - Charles DEBOUCHE 10 14 - 2

GERE0007-1 *Digital electronics, first part* - Bernard HEINESCH 16 18 - 2

HYDR0004-1 *Irrigation* - Aurore DEGRÉ, Sarah GARRÉ 24 - - 2

STE1.32 Machinery and construction 2/2

Study programmes 2013-2014

Gembloux Agro-Bio Tech

Master in Environmental Bioengineering

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|------------|--|----|----|-----|---|
| GERE0011-2 | <i>Building physics and special techniques, 1st part</i> - Frédéric LEBEAU | 24 | 12 | - | 3 |
| GERE0017-1 | <i>Machine elements, 2nd part</i> - MarieFrance DESTAIN - [3h AUTR] | 15 | 18 | [+] | 3 |

Soil components and environmental quality

Requisite "STE1.24 Gestion de l'environnement"

STE1.33 Soil components and environmental quality

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|------------|--|----|---|-----|---|
| GEOP0007-2 | <i>Soil components and the environment, 1st part</i> - Jean Marie MARCOEN - [4h AUTR] | 24 | 8 | [+] | 3 |
| HYDR0005-3 | <i>Hydrogeology and groundwater management</i> - Jean Marie MARCOEN - [4h AUTR, 4h SEM, 8h FT] | 14 | 6 | [+] | 3 |

STE1.34 Soil components and environmental quality

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|------------|---|----|---|-----|---|
| CHIM9249-1 | <i>Microbial ecology</i> - Frank DELVIGNE | 18 | 6 | - | 2 |
| GEOP0003-2 | <i>Pedogenesis and international system of reference</i> - Laurent BOCK - [6h AUTR] | 18 | - | [+] | 2 |
| GEOP0007-3 | <i>Soil components and the environment, 2nd part</i> - Jean Marie MARCOEN | 18 | 6 | - | 2 |

Period 4

Compulsory courses

STE1.41 Placement

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|------------|---|---|---|---|---|
| MANA0004-1 | <i>Portfolio (Master 1)</i> - Philippe LEPOIVRE | - | - | - | 2 |
| RSTG0003-1 | <i>Internship and professional relations</i> - Frédéric LEBEAU, Philippe LEPOIVRE | - | - | - | 3 |

Period 5

Compulsory courses

STE1.51 Data acquisition and modelling

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|------------|---|----|----|---|---|
| HYDR0003-2 | <i>Applied hydrology</i> - Aurore DEGRÉ | 6 | 18 | - | 2 |
| PHYS3009-3 | <i>Exchange Models in biosystems</i> - Marc AUBINET | - | 24 | - | 2 |
| HYDR0006-3 | <i>Modelling of transfers in soils, 2nd part</i> - Aurore DEGRÉ | 12 | 12 | - | 2 |

Optional courses

Chose a module between : "Complement of engineering" and "applied pedology" :

Notice : if the module 'Machines and construction 1/2' was chosen in Period 2, then the module 'Additional Engineering' is compulsory.

if the module 'Environmental management' is chosen in Period 2 then the module 'Applied Pedology' is compulsory.

STE1.52 Complements of engineering

Requisite "Eléments de génie rural et Machines et construction 2/2"

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|------------|---|----|----|---|---|
| ENVT3010-2 | <i>Surveying</i> - Charles DEBOUCHE | 16 | 8 | - | 2 |
| HYDR0008-1 | <i>Hydraulic pump and network</i> - Charles DEBOUCHE | 10 | 14 | - | 2 |
| GERE0003-4 | <i>Theory of structural calculations, 2nd part</i> - Pierre LATTEUR - Suppl : Laurent DUCHENE | 24 | - | - | 2 |

STE1.53 Applied pedology

Requisite "Constituants des sols et qualité des milieux"
"STE1.24 Gestion de l'environnement"

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|------------|---|----|----|-----|---|
| FORE0008-2 | <i>Site analysis and valuation</i> - Hugues CLAESSENS | 14 | 22 | - | 3 |
| GEOP0005-2 | <i>Applied regional geomorphopedology</i> - Laurent BOCK - [18h FT] | 12 | 6 | [+] | 3 |

All year round

Period 6

Compulsory course

STE1.61 English

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|------------|---|---|----|---|---|
| LANG2956-1 | <i>Practice of specialized English for Environmental Sciences and Technology: part 1</i> - Aurore DEGRÉ, Sophie DEPOTERRE, MarieFrance DESTAIN, Estelle MAYARD, Benoît MERCATORIS | - | 24 | - | 4 |
|------------|---|---|----|---|---|

Second year

First semester

Compulsory courses (period 1 and 2)

STE2.10 English

LANG2957-1 *Practice of specialized English for Environmental Sciences and Technology: part 2* - - 36 - 3
Gilles COLINET, Sophie DEPOTERRE, Estelle MAYARD

Optional courses

Choose one option from the following :

"Environmental sciences and technologies" courses programme

Period 1

STE2.11 Soil and project management

GEOP0006-3 *Soil quality evaluation and management* - Gilles COLINET - [6h FT] 18 12 [+] 2

GEST3020-1 *Conceiving and economic assessment of project : food crop and agroforestry* - 12 - [+] 2
Baudouin MICHEL - [12h SEM]

STE2.12 Environmental techniques

CHIM9248-1 *Basic principles of wastewater treatments* - Frank DELVIGNE 24 - - 2

ENVT0036-1 *Sanitation and soil improvement* - Gilles COLINET - [12h AUTR] 6 - [+] 2

HYDR0009-2 *Hydraulic engineering and environmental aspects* - Aurore DEGRÉ - [3h AUTR] 15 6 [+] 2

Period 2

STE2.21 Geomatics applied to the environmental management

ENVT0045-1 *Geomatics and applied remote sensing* - Philippe LEJEUNE 28 44 - 5

Choose one module from :

STE2.22 Machines 2/2

Prerequisite

"STE1.23 Machines et constructions 1/2"

GERE0018-1 *Building physics and special techniques (2nd part)* - Frédéric LEBEAU - [6h 6 12 [+] 2
AUTR]

GERE0007-2 *Digital electronics, second part* - Bernard HEINESCH 6 18 - 2

GERE0012-2 *Automatics and robotics in agriculture* - MarieFrance DESTAIN 12 12 - 2

STE2.23 Environmental management

ECON2248-1 *Environmental economy* - Kevin MARÉCHAL 24 - - 2

ENVT2052-1 *Environmental impact : concepts and methodology* - Catherine DUBOIS - [6h 18 - [+] 2
SEM]

GEOL0009-1 *Space analysis and soil mapping* - Gilles COLINET, Sarah GARRÉ - [6h AUTR] 6 6 [+] 2

Choose one module from :

STE2.24 Plants-Ecosystem-Climate (PEC) relations

GBLX0156-1 *Theoretical aspects of PEC relationships* - Marc AUBINET 12 12 - 2

GBLX0157-1 *Experimental aspects of PEC relationships* - Bernard HEINESCH 12 12 - 2

GBLX0158-1 *Impact of disruptions on PEC exchanges* - Christine MOUREAUX 12 12 - 2

STE2.25 Environmental technology

ENVT0037-1 *Machines and environment* - MarieFrance DESTAIN - [3h AUTR] 9 12 [+] 2

ENVT2053-1 *Physical aspects of waste management* - Luc MINNE - [3h FT] 21 - [+] 2

ENVT2054-1 *Renewable energies* - Yves SCHENKEL - [4h FT] 20 - [+] 2

HEC-ULg programme

GEST3001-1 *People management and organisation* - Jocelyne ROBERT 24 24 - 4

GEST3002-1 *Human Resources* - Jocelyne ROBERT 24 - - 2

GEST3003-1 *Competitive strategy in the marketplace (english language)* - Michael GHILISSEN 16 16 - 3

Study programmes 2013-2014

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| | | | | | |
|------------|---|----|----|-----|----------|
| GEST3004-1 | <i>Marketing (operations and management)</i> (english language) - 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> (english language) - 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 |

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 |

Second semester

Compulsory courses

Period 3

STE2.31 Dissertation

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|------------|--|---|---|-----|-----------|
| RTFE2004-1 | <i>Final thesis</i> - N... | - | - | - | 27 |
| MANA0005-1 | <i>Portfolio (MA2)</i> - Philippe LEPOIVRE | - | - | - | 2 |
| LANG2958-1 | <i>English language : final thesis</i> - Sophie DEPOTERRE, Estelle MAYARD - [12h AUTR] | - | - | [+] | 1 |