

First Year

Period 1

Compulsory courses

Environmental engineering

INGE0003-1	<i>Engine</i> - Charles DEBOUCHE	24	-	-	2
HYDR0007-3	<i>Fluid mechanics</i> - Charles DEBOUCHE	14	10	-	2
HYDR0006-2	<i>Modelling of transfers in soils, 1st part</i> - Aurore DEGRÉ	12	12	-	2

Soil and geotechnics

GERE0008-2	<i>Soil mechanics</i> - Robert CHARLIER, Frédéric COLLIN	24	24	-	4
GEOP0006-2	<i>Soil quality evaluation and management</i> - Gilles COLINET - [6h FT]	6	6	[+]	2

Period 2

Compulsory courses

Project

GERE0015-1	<i>Thematic Project</i> - COLLÉGIALITÉ	-	-	-	6
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Information technology

ENVT2048-1	<i>Introduction to geomatics</i> - Philippe LEJEUNE	8	16	-	2
GERE0006-3	<i>Environmental metrology</i> - Marie-France DESTAIN - [3h AUTR]	24	21	[+]	4

Optional courses

Choose one module from :

Machinery and constructions 1/2

GERE0016-1	<i>Machine elements and computer-aided design, 1st part</i> - Marie-France DESTAIN	18	18	-	3
GERE0003-2	<i>Theory of structural calculations, 1st part</i> - Pierre LATTEUR	36	-	-	3

Data analysis tools and methods

ENVT2050-1	<i>Applied remote sensing</i> - Philippe LEJEUNE	12	12	-	2
ENVT2051-1	<i>Geomatics applied natural resource management</i> - Philippe LEJEUNE	8	16	-	2
STAT1213-1	<i>Elements of multivariate statistical methods</i> - Rodolphe PALM	12	12	-	2

Period 3

Optional courses

Choose one group of modules from "Elements of rural engineering + Construction engineering 2/2" or "Soil composition 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 "Data analysis tools and methods" is chosen during the 2nd period, then the modules "Soil components and environmental quality" are compulsory.

Elements of rural engineering and construction engineering

Requisite

"Machines et constructions 1/2"

Elements of rural engineering

HYDR0010-1	<i>Open channel hydraulics</i> - Charles DEBOUCHE	10	14	-	2
GERE0007-3	<i>Digital electronics, first part</i> - Bernard HEINESCH	16	8	-	2
HYDR0004-1	<i>Irrigation</i> - Dimitri XANTHOULIS	24	-	-	2

Machinery and construction 2/2

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

Soil components and environmental quality

Requisite

"Outils et méthodes d'analyse des données"

Module 1

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]	24	8	[+]	3

Module 2

CHIM9249-1	<i>Microbial ecology of soil and water</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

Professional immersion

MANA0001-1	<i>Human resources and industrial relations management</i> - Philippe LEPOIVRE - [8h AUTR]		-	-	[+]	2
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RSTG0003-1	<i>Placement</i> - Frédéric LEBEAU		-	-	-	4
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Period 5

Compulsory courses

Data Acquisition and Modelling

HYDR0003-2	<i>Applied hydrology</i> - Aurore DEGRÉ		6	18	-	2
PHYS3009-2	<i>Exchange Models in biosystems</i> - Marc AUBINET		8	16	-	2
HYDR0006-3	<i>Modelling of transfers in soils, 2nd part</i> - Aurore DEGRÉ		12	12	-	2

Optional courses

Choose one module from :

Complements of engineering

ENVT3010-2	<i>Surveying (complement)</i> - Charles DEBOUCHE		8	10	-	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		24	-	-	2

Applied pedology

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

Second Year

Optional courses

Choose one option from the following :

"Environmental sciences and technologies" courses programme

Period 1

Corporate and projects management

GEST3028-2	<i>Accounting and management</i> - Philippe LEBAILLY		24	24	-	4
GEST3020-1	<i>Conceiving and economic assessment of project</i> - Baudouin MICHEL - [12h SEM]		12	-	[+]	2

Environmental techniques

CHIM9248-1	<i>Basic principles of wastewater treatments</i> - Frank DELVIGNE		24	-	-	2
ENVT0036-1	<i>Sanitation and soil improvement</i> - Gilles COLINET - [12h AUTR]		6	-	[+]	2
HYDR0009-2	<i>Hydraulic engineering and environmental aspects</i> - Aurore DEGRÉ - [3h AUTR]		15	6	[+]	2

Period 2

Choose one module from :

Machines 2/2

<u>Prerequisite</u>		"Machines et constructions 1/2"			
GERE0018-1	<i>Building physics and special techniques (2nd part)</i> - Frédéric LEBEAU - [6h AUTR]	6	12	[+]	2
GERE0007-2	<i>Digital electronics, second part</i> - Bernard HEINESCH	6	18	-	2
GERE0012-2	<i>Automatics and robotics in agriculture</i> - Marie-France DESTAIN	12	12	-	2

Environmental management

ENVT2049-2	<i>Introduction to environmental assessment</i> - Charles DEBOUCHE	12	-	-	2
ECON2248-1	<i>Environmental economy</i> - Kevin MARÉCHAL	24	-	-	2
ENVT2052-1	<i>The environmental effects of projects and plans</i> - Catherine DUBOIS - [6h SEM]	18	-	[+]	2

Choose one module from :

Land settlement

GEAT0003-1	<i>Introduction to land planning</i> - Jacques TELLER	24	-	-	2
PAYS0007-1	<i>Introduction to landscape analysis and modeling</i> - Jan BOGAERT	12	-	-	2
GEOL0009-1	<i>Space analysis and soil mapping</i> - Gilles COLINET - [6h AUTR]	6	6	[+]	2

Plants-Ecosystem-Climate (PEC) Relations

GBLX0156-1	<i>Theoretical aspects of PEC relationships</i> - Marc AUBINET	12	12	-	2
GBLX0157-1	<i>Experimental aspects of PEC relationships</i> - Bernard HEINESCH	12	12	-	2
GBLX0158-1	<i>Impact of disruptions on PEC exchanges</i> - Christine MOUREAUX	12	12	-	2

Choose one module from :

Aquatic environments management

GESA0001-2	<i>Chemical and physico-chemical analysis of waters</i> - Jean-Paul BARTHELEMY	8	16	-	2
HYDR0011-2	<i>Ecohydrology</i> - Aurore DEGRÉ - [12h FT]	6	-	[+]	2
VEGE0021-1	<i>Limnology</i> - Frédéric FRANCIS - [4h SEM]	10	10	[+]	2

Environmental technologies

ENVT0037-1	<i>Machines and environment</i> - Marie-France DESTAIN - [3h AUTR]	9	12	[+]	2
ENVT2053-1	<i>Waste management</i> - Luc MINNE - [3h FT]	21	-	[+]	2
ENVT2054-1	<i>Renewable energies</i> - [4h FT]	20	-	[+]	2

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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</i> (english language) - Michael GHILISSEN	16	16	-	3
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> - 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

Compulsory courses

Period 3

Dissertation

RTFE0002-1	<i>Final dissertation</i> - N...	-	-	-	27
LANG0907-2	<i>English language : scientific communication</i> - andréas CHAUMOND, Marie-Anne DUFFELER	-	36	-	3