

A single year

Cours de mise à niveau destinés aux étudiants qui choisissent les cours du module "procédés biologiques de valorisation des déchets"

Depending on the previous training of the student and with the approval of the Board of Studies, choose, if necessary, courses totalling maximum 12 ECTS from :

CHIB0010-1	<i>Basis of physical chemistry applied to environment</i> - Magali DELEU	-	-	-	2
HYDR0001-1	<i>General Hydrology</i> - Aurore DEGRÉ	24	-	-	2
HYDR0002-1	<i>Water flow in soils</i> - Aurore DEGRÉ	24	-	-	2
HYDR0006-2	<i>Modelling of transfers in soils, 1st part</i> - Aurore DEGRÉ	12	12	-	2
HYDR0011-1	<i>Ecohydrology</i> - Aurore DEGRÉ - [6h FT]	12	6	[+]	2
CHIM9249-1	<i>Microbial ecology of soil and water</i> - Frank DELVIGNE	18	6	-	2
CHIM9248-1	<i>Basic principles of wastewater treatments</i> - Frank DELVIGNE	24	-	-	2
BIOL2013-2	<i>General microbiology, 1st part</i> - Micheline VANDENBOL	16	8	-	2
BIOL2013-3	<i>General microbiology, 2nd part</i> - Micheline VANDENBOL	16	8	-	2
BIOI0001-1	<i>Industrial microbiology</i> - Philippe THONART	24	-	-	2
ALIM0001-1	<i>Food hygiene</i> - Daniel PORTETELLE, Marianne SINDIC	18	6	-	2
ANIM0004-2	<i>Microbial biochemistry and physiology</i> - Micheline VANDENBOL - [2h AUTR]	12	10	[+]	2

Compulsory course

SMEM0024-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	15
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Optional courses

With the approval of the Board of Studies, choose compulsory courses or basic courses totaling 15 ECTS from the programme of the 1st year of Master in Environmental Management, professional focus :

Cross-disciplinary activities

ENVT0010-1	<i>Multidisciplinary approach to environmental issues</i> - François MELARD, Catherine MOUGENOT, Anne-Claude ROMAIN, Nathalie SEMAL	15	36	-	4
ENVT0846-2	<i>Introduction to Sustainable Development</i> - Marc MORMONT, Pierre M. STASSART	18	6	-	2
ENVT0849-2	<i>Collection and treatment of environmental information including systems analysis</i> - Philippe ANDRE, Jacques NICOLAS	18	18	-	3

Environment and resources

ENVT0011-1	<i>Ecosystems : status and resources</i> - Célia JOAQUIM#JUSTO, Emmanuël SÉRUSIAUX	45	6	-	4
ENVT0012-1	<i>Energy supply resources</i> - Jean-Marie HAUGLUSTAINE	18	6	-	2

Impacts

ENVT0848-2	<i>Impacts of human activities on ecosystems and including land use</i> - Célia JOAQUIM#JUSTO, Angélique LÉONARD, Roberto RENZONI, Emmanuël SÉRUSIAUX	24	18	-	3
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Society and environment

SPOL0382-1	<i>Foundations of environmental policies/law</i> - Sylviane LEPRINCE	20	5	-	3
ECON0920-1	<i>Basis of environmental economy</i> - Henry-Jean GATHON, Axel GAUTIER, Michel HERMANS, Bernard JURION	20	5	-	3

Tools

ENVT0013-1	<i>Assessment tools (impact assessment, LCA)</i> - Alain HANSON, Jacques NICOLAS, Nathalie SEMAL	30	20	-	4
ENVT0014-1	<i>Multicriteria analysis</i> - Jean-Jacques BOREUX	20	20	-	3
ENVT0015-1	<i>Tools of environmental management (EMS, prospective, spatial planning)</i> - Marc MORMONT, Francis ROSILLON, Nathalie SEMAL, Pierre M. STASSART	30	20	-	4
ENVT0016-1	<i>Bayesian statistics applied to environment</i> - Jean-Jacques BOREUX	24	6	-	2

Sustainable development

ENVT0873-2	<i>Sustainable development and governance (sociology of policies)</i> - Marc MORMONT	30	20	-	4
ENVT0847-1	<i>Epistemology and environment (environmental knowledge models)</i> - François MELARD	15	10	-	2
ENVT0017-1	<i>Current issues of sustainable development</i> - Catherine MOUGENOT, Pierre M. STASSART	30	20	-	4

ARCH0076-1	<i>Land planning, urban planning and energy</i> - Sigrid REITER, Jacques TELLER	30	20	-	4
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Health and environment

ENVT0018-1	<i>Ecotoxicology and quantification of ecotoxicological risk</i> - Célia JOAQUIM#JUSTO	20	20	-	4
ESHY0128-1	<i>Environmental toxicology and health impacts</i> - Corinne CHARLIER	20	20	-	4
Water and soil					
GEOL0271-1	<i>Groundwater</i> - Alain DASSARGUES, Philippe ORBAN	20	20	-	3
GEOG0623-1	<i>Sustainable development of waterways</i> - Philippe RIGO	20	5	-	3
REAU0001-1	<i>Hydrology and surface hydraulics</i> - Michel PIROTON	25	25	-	4
ESHY0084-3	<i>Environmental microbiology</i> - Monique CARNOL, Francis ROSILLON	20	20	-	4
Waste					
ENVT0844-2	<i>Energy Recovery from Waste</i> - Michel CRINE	15	10	-	2
<i>Notice : intervention of external speakers</i>					
ENVT0857-1	<i>Processing and recycling of solid waste and soils (ex-situ)</i> - Stoyan GAYDARDZHIEV	20	20	-	3
Energy					
ENVT0867-1	<i>Environmental performance of buildings</i> - Jean-Marie HAUGLUSTAINE	20	20	-	3
ENVT0019-1	<i>Energy balance and CO2 emissions on a building life-cycle, Part 1 : Buildings to be built</i> - Jean-Marie HAUGLUSTAINE	20	20	-	3

With the approval of the Board of Studies, choose 30 course credits from one of the five modules below, 5 credits can be replaced by courses in programme from the 1st year of the Masters in Management and Environmental Sciences specialising in:

Notice : if students later wish to follow a Masters 120, they cannot enrol for the specialisation corresponding to the 30 credits chosen.

Environmental Monitoring					
ENVT0852-2	<i>Data collection and processing</i> - Jean-Jacques BOREUX, Jacques NICOLAS, Eric PIRARD	36	36	-	6
<i>Measurement tools for environmental parameters</i>					
ENVT2036-2	<i>Part 1 - Hydrosphere, biosphere and geosphere</i> - Henry-Michel CAUCHIE, Francis ROSILLON, Bernard TYCHON, Jean-Luc VASEL	24	24	-	4
ENVT2037-2	<i>Part 2 - Atmosphere</i> - Véronique BEAUVOIS, Anne-Sophie CARNOY (GRAMME), Jean-Jacques EMBRECHTS, Jacques NICOLAS, Anne-Claude ROMAIN	36	36	-	6
ENVT2038-2	<i>Part 3 : Energy and mass flows</i> - Philippe ANDRE, Jean-Marie HAUGLUSTAINE	24	24	-	4
ENVT0854-1	<i>Information representation</i> - Jean-Jacques BOREUX, Jacques NICOLAS, Bernard TYCHON	40	20	-	5
ENVT0855-2	<i>Decision Support</i> - Jean-Jacques BOREUX	15	15	-	2
ENVT0020-1	<i>Environment and health</i> - Laurence COUNET, Jacques NICOLAS	18	18	-	3
Sanitary Engineering					
ENVT0856-2	<i>Characterisation of water and gaseous, liquid and solid effluents</i> - Anne-Claude ROMAIN, Louis VANDEVENNE, Jean-Luc VASEL	36	18	-	4
ENVT0872-1	<i>Water treatment</i> - Jean-Luc VASEL	60	60	-	10
GEOL0272-2	<i>Management of groundwater and surface water quantity</i> - Serge BROUYÈRE, Benjamin DEWALS, Philippe ORBAN	36	36	-	6
GCIV0187-2	<i>Storage : containing waste</i> - Frédéric COLLIN, Jean-Marie RIGO, Jean-Luc VASEL	36	18	-	4
ENVT0858-2	<i>Remediation of contaminated sites</i> - Serge BROUYÈRE	18	18	-	3
ENVT0859-2	<i>Environmental acoustics</i> - Jean-Jacques EMBRECHTS	18	18	-	3
Interface between societies and the environment					
SPOL2306-1	<i>Policy of Energy</i>				4
	- <i>Part 1 : Policies to reduce emissions</i> - Quentin MICHEL	9	9	-	
	- <i>Part 2 : Regional and local policies</i> - Jean-Marie HAUGLUSTAINE	9	9	-	
ENVT0860-3	<i>Environmental Controversies</i> - François MELARD	30	18	-	4
GEST3066-1	<i>Transition Strategies</i> - Pierre M. STASSART	18	18	-	3
ENVT0005-4	<i>Representations Practices of Environment and Nature</i> - Catherine MOUGENOT, Lucienne STRIVAY	18	18	-	3
ENVT0862-2	<i>Methodology (quantitative and qualitative analysis)</i> - François MELARD, Catherine MOUGENOT	18	30	-	4
ENVT0861-2	<i>Communication and environment</i> - Marianne VON FRENCKELL	30	24	-	4
ENVT0021-1	<i>Case Study</i> - Jean-Marie HAUGLUSTAINE, François MELARD, Marc MORMONT, Catherine MOUGENOT, Pierre M. STASSART	12	60	-	6
ENVT0022-1	<i>Seminar to prepare the final thesis</i> - COLLÉGIALITÉ	12	12	-	2
Renewable energies					
ENVT0865-2	<i>Energy and climate</i> - Jean-Marie HAUGLUSTAINE	18	16	-	2
MECA0459-1	<i>Applied thermodynamics. Energy conversion techniques. Thermic power stations</i> -	20	20	-	3

	Ahmed RASSILI				
CHIM0622-2	<i>Energy vectors</i> - Jean-Marie HAUGLUSTAINE	18	6	-	2
ELEC0432-2	<i>Power system network</i> - Jean-Louis LILIEN	24	12	-	3
MECA0457-2	<i>Combustion. Technical and environmental aspects</i> - Philippe NGENDAKUMANA	18	6	-	2
ENV0866-2	<i>Atmospheric pollution. Management of gaseous waste</i> - Angélique LÉONARD, Anne-Claude ROMAIN	18	18	-	3
MECA0453-2	<i>Optimal use of energy in systems and processes</i> - Michel FEIDT	18	18	-	3
MECA0458-2	<i>Refrigeration and air-conditioning</i> - Philippe ANDRE, Rahal BOUSSEHAIN	24	24	-	4
ENV0874-2	<i>Non conventional energy technologies and renewables</i> - Philippe ANDRE, Olivier LOTTIN, Bernard TYCHON	54	54	-	8
Biological methods of waste recovery (courses given on the site of Gembloux)					
ENV2055-1	<i>Ecosystem deterioration</i> - Roger PAUL	12	-	-	2
GESA0014-1	<i>Life cycle analysis</i> - Bruno CAMPANELLA	12	12	-	2
GESA0006-1	<i>Practical aspects of physico-chemical wastewater treatment</i> - Philippe THONART	-	36	-	3
GESA0007-1	<i>Fundamental processes of physico-chemical wastewater treatment</i> - Philippe THONART	24	-	-	2
GESA0008-1	<i>Wastewater treatment microbiology</i> - Frank DELVIGNE	15	9	-	2
GESA0009-1	<i>Practical aspects of biological wastewater treatments</i> - Frank DELVIGNE - [27h FT]	3	6	[+]	3
GESA0010-1	<i>Fundamental processes of biological wastewater treatment</i> - Frank DELVIGNE	24	-	-	2
GESA0011-1	<i>Technology of water purification</i> - Philippe THONART	12	-	-	2
CHIM9225-1	<i>Gas effluents processing</i> - Jean-Marc ALDRIC	14	-	-	2
GESA0015-1	<i>Waste recovery : latest developments</i> - Philippe THONART - [20h SEM]	20	20	[+]	5
ENV2053-1	<i>Waste management</i> - Luc MINNE - [3h FT]	21	-	[+]	2
GESA0013-1	<i>Soil remediation</i> - Bruno CAMPANELLA, Gilles COLINET, Jacqueline DESTAIN - [6h SEM]	30	-	[+]	3