

## Study programmes 2023-2024

# **Faculty of Sciences**

Master in environmental science and management (120 ECTS) (Renewable energy and sustainable buildings - Joint-degree programme with the

Block view of the stady programmeurg)

Block 1

#### Compulsory courses

Semester 1 at	ULiège-Arlon					
Socio-ecologic	al issues: regulated sectors of the environment					
ENVT0892-1	Integrated energy management, particularly in the construction industry - Philippe Andre, Maxime Habran	Q1	32	16	-	4
ENVT3040-2	Integrated and participative management of water resources - Johan Derouane, Joost Wellens	Q1	32	16	-	4
ENVT3127-1	Biodiversity and societies - Dorothée DENAYER - [12h Mon. WS]	Q1	30	-	[+]	4
ENVT0893-1	Air quality: Pressure - State - Response - AnneClaude ROMAIN, Bernard TYCHON - [8h Vis.]	Q1	32	8	[+]	4
ENVT0894-1	Environment (soil) - Bernard TYCHON - [8h FW]	Q1	20	20	[+]	4
<b>Cross-cutting</b>	approaches to environmental issues					
ENVT0846-2	Introduction to the Anthropocene - Pierre M. STASSART - [6h FW, 4h SEM]	Q1	20	-	[+]	2
ENVT0049-1	System analysis applied to environment - Philippe Andre	Q1	16	8	-	2
ECON0945-1	Economy, energy and environment - Nadia DE ZOTTI, HenryJean GATHON, Axel GAUTIER	Q1	24	5	-	2
SPOL0382-2	Foundations of environmental politicies/law - Sylviane LEPRINCE	Q1	27	9	-	3
Semester 2 at	Unilu					
HULG2954-2	Energy efficiency of buildings, part 3 & lab 2 (english language)	Q2	-	-	-	3
HULG2954-1	Energy efficiency of buildings, part 1 and 2 & lab I (english language)	Q2	-	-	-	7
HULG2957-1	Thermodynamics (english language)	Q2	-	-	-	5
HULG2960-1	Policy, assessment & evaluation of energy projects on European Level (english language)	Q2	-	-	-	3
HULG2962-1	Transport Systems Analysis (english language)	Q2	-	-	-	4
HULG2963-1	Sustainable Water and Resources Management (english language)	Q2	-	-	-	4
HULG2964-1	Initiation to Project Work (english language)	Q2	-	-	-	2
HULG2965-1	Circular economy in construction sector (english language)	Q2	-	-	-	3

#### Compulsory courses

#### Semester 4

Block 2

SMEM0042-1 Dissertation - COLLÉGIALITÉ TA -25

#### **Optional courses**

With the jury is agreement, choose one or more courses to support the dissertation for a total of 5 credits from:

Internship or civic service - Collégialité TA -60 5

by means of reinforcing specific skills, courses in the Masters in Environmental Sciences and Management [...]

[...] or from another programme

#### Single focus

#### **Professional Focus**



# Study programmes 2023-2024

# **Faculty of Sciences**

Master in environmental science and management (120 ECTS) (Renewable energy and sustainable buildings - Joint-degree programme with the Semester Jaiver of Luxembourg)

### Cross-cutting approaches to environmental issues

		rr					
	ENVT0040-2	Transitions theory and management ecological transitions - N, Pierre M. Stassart - [15h SEM]	Q1	30	30	[+]	5
	ENVT0897-1	Introduction to environmental and health risks - HenryMichel CAUCHIE, Pierre OZER - [6h SEM, 2d FW]	Q1	24	12	[+]	5
	Renewable ene	rgy and sustainable construction module					
	ENVT0068-2	$\label{eq:continuous} \textit{Exploitation of renewable energy} \text{ - Philippe Andre, Manfred Greger,} \\ \text{Vincent Hanus}$	Q1	32	16	-	4
	ENVT0072-2	Technical and economic analysis of energy systems: theory and project - Philippe Andre, Manfred Greger, Vincent Hanus, Abdelhamid Kheiri, Olivier Lottin	Q1	20	28	-	4
	ENVT0069-2	Decentralised production and storage of energy - Vincent HANUS, Olivier LOTTIN	Q1	30	18	-	4
With the jury is agreement and depending on the student is course, choose two courses from:							
	ENVT0901-1	Sizing and simulation of energy systems in the construction industry - Philippe Andre	Q1	24	24	-	4
	ELEC0080-1	Energy networks	Q1				4
		<ul><li>- Part 1: Electrical energy systems - Damien ERNST</li><li>- Part 2: Heat networks - Pierre DEWALLEF - [1d FW]</li></ul>		24 6	12 6	- [+]	
	ENVT3059-2	Energy optimisation in construction and integrating renewable energies - Philippe ANDRE	Q1	24	24	-	4
	GEOL1031-2	Management of groundwater quantity and quality - Serge Brouyère, Philippe Orban - [1d FW]	Q1	24	20	[+]	4
	ENVT3041-1	Analytical and decision-making tools for integrated management of water resources - JeanFrançois Deliège	Q1	22	16	-	4
	ENVT3029-1	Public policy and action - Sébastien Brunet, Patrick Steyaert	Q1	24	-	-	4
	ENVT0073-1	Agricultural production systems and food security - Antoine DENIS, Pierre OZER, Bernard TYCHON	Q1	20	20	-	4
	ENVT0902-1	Modelling atmospheric dispersion - Marie DURY, Fabian LENARTZ, AnneClaude ROMAIN	Q1	24	20	-	4

With the jur's agreement and for valid reasons, the courses in the Block 2 programme of the Master in environmental science and management (120 ECTS), with a specialised focus may be replaced by courses in Block 1 or by courses from other programmes.

Bloc d'aménagement du programme de l'année

# Additional credits Master in environmental science and management ( $120\ ECT$ ) - joint degree with Luxembourg

Depending on the student's previous training and in agreement with the Jury, choose courses for a maximum of 14 credits from:

ENVT0060-1	Introduction to environmental sociology, Part 1: Approaches in environmental sociology - François MELARD	Q1	8	8	-	2
ECON0944-1	Elements of economy for environmental sciences - Pierre COPÉE	Q1	18	5	-	2
ENVT0048-2	Statistics applied to the environment: introduction to the statistical approach and aspects of univariate statistics - Laurent LOOSVELDT	Q1	15	15	-	3

University of Liège - Academic Affairs Department Date of data : 13/05/2024 - Page 2 / 3



# Study programmes 2023-2024

# Faculty of Sciences

# Master in environmental science and management (120 ECTS) (Renewable energy and sustainable buildings - Joint-degree programme with the

LANG2972 <b>U</b> r	nit/ensity- Ofvelu xeensbourge e) - Véronique Doppagne, Kevin Noiroux	Q1	12	12	-	2
LANG2973-1	English 2 - Level 1 (english language) - Véronique DOPPAGNE, Kevin NOIROUX	Q2	12	12	-	2
ENVT0062-1	Introduction to chemistry and environmental biology - Armélinda Agnello, Célia JoaquimJusto, AnneClaude Romain	Q1	16	16	-	4
ENVT0896-1	Introduction to environmental physics and thermodynamics - Philippe Andre	Q1	32	16	-	4

University of Liège - Academic Affairs Department Date of data : 13/05/2024 - Page 3 / 3