

**Block 1**

**Compulsory courses**

**Semester 1 at ULiège-Arlon**

**Socio-ecological issues: regulated sectors of the environment**

ENVT0892-1	<i>Integrated energy management, particularly in the construction industry - Philippe ANDRE, Maxime HABRAN</i>	Q1	32	16	-	<b>4</b>
ENVT3040-2	<i>Integrated and participative management of water resources - Johan DEROUANE, Joost WELLENS</i>	Q1	32	16	-	<b>4</b>
ENVT3127-1	<i>Biodiversity and societies - Dorothée DENAYER - [12h Mon. WS]</i>	Q1	30	-	[+]	<b>4</b>
ENVT0893-1	<i>Air quality: Pressure - State - Response - AnneClaude ROMAIN, Bernard TYCHON - [8h Vis.]</i>	Q1	32	8	[+]	<b>4</b>
ENVT0894-1	<i>Environment (soil) - Bernard TYCHON - [8h FW]</i>	Q1	20	20	[+]	<b>4</b>

**Cross-cutting approaches to environmental issues**

ENVT0846-2	<i>Introduction to the Anthropocene - Pierre M. STASSART - [6h FW, 4h SEM]</i>	Q1	20	-	[+]	<b>2</b>
ENVT0049-1	<i>System analysis applied to environment - Philippe ANDRE</i>	Q1	16	8	-	<b>2</b>
ECON0945-1	<i>Economy, energy and environment - Nadia DE ZOTTI, HenryJean GATHON, Axel GAUTIER</i>	Q1	24	5	-	<b>2</b>
SPOL0382-2	<i>Foundations of environmental policies/law - Sylviane LEPRINCE</i>	Q1	27	9	-	<b>3</b>

**Semester 2 at Unilu**

HULG2954-2	<i>Energy efficiency of buildings, part 3 &amp; lab 2 (english language)</i>	Q2	-	-	-	<b>3</b>
HULG2954-1	<i>Energy efficiency of buildings, part 1 and 2 &amp; lab I (english language)</i>	Q2	-	-	-	<b>7</b>
HULG2957-1	<i>Thermodynamics (english language)</i>	Q2	-	-	-	<b>5</b>
HULG2960-1	<i>Policy, assessment &amp; evaluation of energy projects on European Level (english language)</i>	Q2	-	-	-	<b>3</b>
HULG2962-1	<i>Transport Systems Analysis (english language)</i>	Q2	-	-	-	<b>4</b>
HULG2963-1	<i>Sustainable Water and Resources Management (english language)</i>	Q2	-	-	-	<b>4</b>
HULG2964-1	<i>Initiation to Project Work (english language)</i>	Q2	-	-	-	<b>2</b>
HULG2965-1	<i>Circular economy in construction sector (english language)</i>	Q2	-	-	-	<b>3</b>

**Block 2**

**Compulsory courses**

**Semester 4**

SMEM0042-1	<i>Dissertation - COLLÉGIALITÉ</i>	TA	-	-	-	<b>25</b>
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**Optional courses**

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

ENVT0154-1	<i>Internship or civic service - COLLÉGIALITÉ</i>	TA	-	60	-	<b>5</b>
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[...] by means of reinforcing specific skills, courses in the Masters in Environmental Sciences and Management

[...] or from another programme

**Single focus**

**Professional Focus**

#### Cross-cutting approaches to environmental issues

ENVT0040-2	<i>Transitions theory and management ecological transitions</i> - N..., Pierre M. STASSART - [15h SEM]	Q1	30	30	[+]	5
ENVT0897-1	<i>Introduction to environmental and health risks</i> - HenryMichel CAUCHIE, Pierre OZER - [6h SEM, 2d FW]	Q1	24	12	[+]	5

#### Renewable energy and sustainable construction module

ENVT0068-2	<i>Exploitation of renewable energy</i> - Philippe ANDRE, Manfred GREGER, Vincent HANUS	Q1	32	16	-	4
ENVT0072-2	<i>Technical and economic analysis of energy systems : theory and project</i> - Philippe ANDRE, Manfred GREGER, Vincent HANUS, Abdelhamid KHEIRI, Olivier LOTTIN	Q1	20	28	-	4
ENVT0069-2	<i>Decentralised production and storage of energy</i> - Vincent HANUS, Olivier LOTTIN	Q1	30	18	-	4

With the jury's agreement and depending on the student's course, choose two courses from:

ENVT0901-1	<i>Sizing and simulation of energy systems in the construction industry</i> - Philippe ANDRE	Q1	24	24	-	4
ELEC0080-1	<i>Energy networks</i> - Part 1: <i>Electrical energy systems</i> - Damien ERNST - Part 2: <i>Heat networks</i> - Pierre DEWALLEF - [1d FW]	Q1	24	12	-	4
ENVT3059-2	<i>Energy optimisation in construction and integrating renewable energies</i> - Philippe ANDRE	Q1	24	24	-	4
GEOL1031-2	<i>Management of groundwater quantity and quality</i> - Serge BROUYÈRE, Philippe ORBAN - [1d FW]	Q1	24	20	[+]	4
ENVT3041-1	<i>Analytical and decision-making tools for integrated management of water resources</i> - JeanFrançois DELIÈGE	Q1	22	16	-	4
ENVT3029-1	<i>Public policy and action</i> - Sébastien BRUNET, Patrick STEYAERT	Q1	24	-	-	4
ENVT0073-1	<i>Agricultural production systems and food security</i> - Antoine DENIS, Pierre OZER, Bernard TYCHON	Q1	20	20	-	4
ENVT0902-1	<i>Modelling atmospheric dispersion</i> - 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	<i>Introduction to environmental sociology, Part 1: Approaches in environmental sociology</i> - François MELARD	Q1	8	8	-	2
ECON0944-1	<i>Elements of economy for environmental sciences</i> - Pierre COPÉE	Q1	18	5	-	2
ENVT0048-2	<i>Statistics applied to the environment: introduction to the statistical approach and aspects of univariate statistics</i> - Laurent LOOSVELDT	Q1	15	15	-	3

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

Code	Name	Teacher(s)	Period	ECTS	Prerequisites	Grading
LANG2972	French - Level 1 (French language)	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