

**Cycle view of the study programme**

B1 Or Th Pr Au Cr

**Cours obligatoires de la finalité (B2 : 10Cr)**

**Cross-cutting approaches to environmental issues**

ENVT0040-2	<i>Transitions theory and management ecological transitions</i> - N..., Pierre M. STASSART - [15h SEM]	B2	Q1	30	30	[+]	5
ENVT0897-1	<i>Introduction to environmental and health risks</i> - HenryMichel CAUCHIE, Pierre OZER - [6h SEM, 2d FW]	B2	Q1	24	12	[+]	5

**Cours au choix de la finalité (B2 : 20Cr)**

**En accord avec le jury, choisir un module parmi les 5 modules ci-dessous : (B2 : 1Nbr)**

*Notice* : Un module pourrait ne pas être organisé si moins de 3 étudiants sont inscrits à chacun des 3 cours de ce module.

**Monitoring polluted atmospheres module (B2 : 1Nbr)**

(Coordinatrice : Anne-Claude ROMAIN)

ENVT0170-1	<i>Environmental impact of buildings</i> - AnneSophie CARNOY, N..., AnneClaude ROMAIN	B2	Q1	32	8	-	4
ENVT0898-1	<i>Sensory pollution (smell, noise, light, etc.)</i> - Thierry KERVYN, N..., AnneClaude ROMAIN, Francis VENTER	B2	Q1	32	10	-	4
ENVT0899-1	<i>Metrology of atmospheric pollutants</i> - AnneClaude ROMAIN - [6h Vis.]	B2	Q1	30	4	[+]	4

**Prerequisite :**  
ENVT0893-1 - Qualité de l'air : Pression - Etat - Réponse

**Module Médiations et transitions (B2 : 1Nbr)**

(Coordinatrice : Dorothée DENAYER)

ENVT3028-1	<i>Civic participation</i> - Dorothée DENAYER, Pierre M. STASSART	B2	Q1	36	-	-	4
ENVT3030-2	<i>Qualitative investigation techniques</i> - Dorothée DENAYER, Nathalie SEMAL - [30h Cl. inv.]	B2	Q1	12	-	[+]	4
ENVT0021-3	<i>Field training : case studies</i> - Pierre M. STASSART - [12h SEM, 48h Mon. WS]	B2	Q2	9	-	[+]	4

**Developing countries module (B2 : 1Nbr)**

(Coordinateur : Bernard TYCHON)

ENVT3035-2	<i>Wastewater treatment, production of drinking water and recovery of wastewater for irrigation</i> - Hugues JUPSIN - [10h FT]	B2	Q1	24	6	[+]	4
ENVT0073-1	<i>Agricultural production systems and food security</i> - Antoine DENIS, Pierre OZER, Bernard TYCHON	B2	Q1	20	20	-	4
ENVT0736-3	<i>Development projects management and communication</i> - Part 1: Development projects management - N..., Bernard TYCHON - Part 2: Communication - Joost WELLENS	B2	Q1	12 8	12 8	-	4

**Integrated water resource management module (B2 : 1Nbr)**

(Coordinateur : Joost WELLENS)

ENVT3035-2	<i>Wastewater treatment, production of drinking water and recovery of wastewater for irrigation</i> - Hugues JUPSIN - [10h FT]	B2	Q1	24	6	[+]	4
ENVT0900-1	<i>Socio-economy of water</i> - Joost WELLENS	B2	Q1	20	20	-	4
ENVT0056-2	<i>Irrigation and water management</i> - Joost WELLENS	B2	Q1	30	8	-	4

#### Renewable energy and sustainable construction module (B2 : 1Nbr)

(Coordinateur : Philippe ANDRE)

ENVT0068-2	<i>Exploitation of renewable energy</i> - Philippe ANDRE, Manfred GREGER, N... - [0,5d FT]	B2	Q1	37	3	[+]	4
ENVT0072-2	<i>Technical and economic analysis of energy systems and project methodology</i> - Philippe ANDRE, N..., N...	B2	Q1	28	12	-	4
ENVT0904-1	<i>Simulation and optimisation of building energy systems</i> - Philippe ANDRE	B2	Q1	16	24	-	4

En accord avec le jury et en fonction du parcours, choisir deux cours parmi les 7 cours ci-dessous : (B2 : 8Cr)

*Notice* : - Les cours ne seront organisés qu'à partir de 3 étudiants inscrits.  
- Si le cours ENVT0069-2 est choisi, le cours ENVT0905-1 doit également être sélectionné.

ENVT0069-2	<i>Decentralised production and storage of energy</i> - N..., N..., Sébastien THOMAS	B2	Q1	30	10	-	4
ENVT0905-1	<i>Energy communities</i> - Philippe ANDRE	B2	Q1	20	20	-	4
ELEC0080-1	(pas organisé en 2024-2025) <i>Energy networks</i> - Part 1: <i>Electrical energy systems</i> - Damien ERNST - Part 2: <i>Heat networks</i> - Pierre DEWALLEF - [4h Vis.]	B2	Q1	20	10	-	4
GEOL1031-2	<i>Management of groundwater quantity and quality</i> - Serge BROUYÈRE, Philippe ORBAN - [1d FW]	B2	Q1	25	15	[+]	4
ENVT3041-1	<i>Analytical and decision-making tools for integrated management of water resources</i> - JeanFrançois DELIÈGE	B2	Q1	22	16	-	4
ENVT3029-1	<i>Public policy and action</i> - Sébastien BRUNET, N...	B2	Q1	27	-	-	4
ENVT0902-1	<i>Modelling atmospheric dispersion</i> - N..., N..., AnneClaude ROMAIN <b>Prerequisite :</b> ENVT0902-1 - Modélisation de la dispersion atmosphérique	B2	Q1	20	20	-	4

*Notice* : Students who wish to choose the renewable energy and sustainable construction programme must have followed, in the first year (second term), the 30 credits in the second term of the Master of Sustainable Development (Energy and Environment track) at the University of Luxembourg, as set out in the joint-degree agreement between the two universities. The list of courses in Block 2 which form part of this curriculum is available from the Jury or from the student affairs office within the Faculty of Science.

With the jury's agreement and for duly substantiated reasons, courses in Block 2 of the specialised Masters in Environmental Sciences and Management may be replaced by courses from Block 1 or by courses chosen from programmes from other parts of the Faculty of Sciences, other faculties, or other universities.

*Notice* : The list of refresher courses aimed at students who have direct access to the 2nd year of the Masters with a possible addition to the programme is available from the Jury or from the student services of the Faculty of Sciences.

#### Cours obligatoires du tronc commun (B1 : 48Cr, B2 : 25Cr)

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

ENVT0892-1	<i>Integrated energy management, particularly in the construction industry</i> - Philippe ANDRE, N...	B1	Q1	28	12	-	4
ENVT3040-2	<i>Integrated and participative management of water resources</i> - Johan DEROUANE, Joost WELLENS	B1	Q1	24	16	-	4
ENVT3127-1	<i>Biodiversity and societies</i> - Dorothée DENAYER	B1	Q1	30	10	-	4
ENVT0893-1	<i>Air quality: Pressure - State - Response</i> - AnneClaude ROMAIN, Bernard TYCHON	B1	Q1	34	4	-	4

ENVT0894-1	<i>Environment (soil)</i> - Bernard TYCHON	B1	Q1	25	15	-	4
<b>Cross-cutting approaches to environmental issues</b>							
ENVT0010-1	<i>Seminar - Integrated approach to environmental issues</i> - Moussa EL JARROUDI, Claudia FALZONE, Koufanou HIEN, Eleonore KIRSCH, Marie LANG, N..., Nathalie SEMAL - [30h SEM, 30h Mon. WS]	B1	Q2	3	-	[+]	4
ENVT0846-2	<i>Introduction to the Anthropocene</i> - Pierre M. STASSART - [6h FW, 4h SEM]	B1	Q1	20	-	[+]	2
ENVT0049-1	<i>System analysis applied to environment</i> - Philippe ANDRE	B1	Q1	14	6	-	2
ENVT3124-1	<i>Environmental data processing</i> - Part 1: Univariate and bivariate statistics in the environment - Laurent LOOSVELDT - Part 2: Introduction to R - AnneClaude ROMAIN - Part 3: Statistical arguments - Nathalie SEMAL - [6h Cl. inv.]	B1	Q2	8	8	-	4
ENVT3045-1	<i>Ecosystems : conditions, anthropic impacts and management</i> - [16h Cl. inv.]	B1	Q2	4	20	[+]	4
ECON0945-1	<i>Economy, energy and environment</i> - Nadia DE ZOTTI, HenryJean GATHON, Axel GAUTIER	B1	Q1	20	-	-	2
SPOL0382-2	<i>Foundations of environmental policies/law</i> - N...	B1	Q1	30	-	-	3
ENVT2027-3	<i>Application of teledetection and geographical information systems for environmental management</i> - Antoine DENIS, Bernard TYCHON	B1	Q2	14	26	-	4
ENVT3054-2	<i>Methodological Approach to Environmental Science</i> - Marjorie BARDIAU, Léna CAUCHIE, Antoine DENIS - [4h Mon. WS]	B1	Q2	16	10	[+]	3
SMEM0042-1	<i>Dissertation</i> - COLLÉGIALITÉ	B2	TA	-	-	-	25

#### Cours au choix du tronc commun (B1 : 12Cr, B2 : 5Cr)

##### Specialised courses

With the jury's agreement and depending on the student's course, choose three courses from: (B1 : 12Cr)

##### Remarques :

- Les cours ne seront organisés qu'à partir de 5 étudiants inscrits.
- Le cours ENVT0155-1 ne peut pas être choisi en même temps que les cours ENVT0867-1 et ENVT0895-1 (incompatibilité horaire).

*Notice* : Courses only take place if at least five students are registered.

GEOG0664-1	<i>Land use planning and mobility</i> - Christophe BREUER, JeanMarie HALLEUX - [2d FW]	B1	Q2	15	15	[+]	4
ENVT0895-1	<i>Environment and development: social, economic, cultural, institutional, legal and political aspects</i> - Fabio BERTI, N... - [16h Mon. WS]	B1	Q2	32	-	[+]	4
ENVT0867-1	<i>Environmental performance of buildings (english language)</i> - Philippe ANDRE	B1	Q2	20	20	-	4
ENVT3026-1	<i>Social study of science and technology</i> - François MELARD - [24h SEM]	B1	Q1	12	-	[+]	4
ENVT0155-1	<i>Methodology, sampling, indicators</i> - AnneClaude ROMAIN, Nathalie SEMAL	B1	Q2	36	4	-	4
ENVT3046-1	<i>Pressures on the underground</i> - Part 1: geological map - N... - Part 2 : groundwater - Philippe ORBAN	B1	Q2	4	4	-	4
ENVT3016-1	<i>Environmental toxicology and health</i> - Part 1: Ecotoxicology and quantification of ecotoxicological risk	B1	Q2	16	8	-	4

- Part 2: Environmental toxicology and health impacts

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*Notice* : Students who wish to choose the renewable energy and sustainable construction programme in the second year will follow, in the second term, 30 credits from term 2 of the Master of Sustainable Development (Energy and Environmental track) at the University of Luxembourg, as set out in the joint-degree agreement between the two universities. The 30 course credits to be followed at ULiège during the first term will be decided, with the agreement of the Jury, on the basis of the compulsory classes in the first year.

With the jury's agreement and for duly substantiated reasons, courses in the specialised Masters in Environmental Sciences and Management may be replaced by courses chosen from programmes in other parts of the Faculty of Sciences, other faculties, or other universities.

With the jury's agreement, choose one or more courses to support the dissertation for a total of 5 credits from: (B2 : 5Cr)

ENVT0154-1 *Internship or civic service* - COLLÉGIALITÉ B2 TA - 60 - 5  
 [...] by means of reinforcing specific skills, courses in the Masters in Environmental Sciences and Management  
 [...] or the courses from another programme

## Additional ECTS Master in environmental science and management - organized in Arlon (120 ECTS)

### Optional courses (B0 : 14Cr)

Depending on the student's previous training and with the agreement of the jury, choose courses for a maximum of 14 credits among the following : (B0 : 14Cr)

ENVT0060-1	<i>Introduction to environmental sociology, Part 1: Approaches in environmental sociology</i> - François MELARD	B0	Q1	8	8	-	2
ECON0944-1	<i>Elements of economy for environmental sciences</i> - Pierre COPÉE	B0	Q1	20	2	-	2
ENVT0048-2	<i>Statistics applied to the environment: introduction to the statistical approach and aspects of univariate statistics</i> - Laurent LOOSVELDT	B0	Q1	15	15	-	3
LANG2972-1	<i>English 1 - Level 1</i> (english language) - Véronique DOPPAGNE, Kevin NOIROUX - [10h Mon. Read.]	B0	Q1	10	10	[+]	2
LANG2973-1	<i>English 2 - Level 1</i> (english language) - Véronique DOPPAGNE, Kevin NOIROUX - [10h Mon. Read.]	B0	Q2	10	10	[+]	2
ENVT0062-1	<i>Introduction to chemistry and environmental biology</i> - Armélinda AGNELLO, Célia JOAQUIMJUSTO, AnneClaude ROMAIN	B0	Q1	26	4	-	4
ENVT0896-1	<i>Introduction to environmental physics and thermodynamics</i> - Philippe ANDRE	B0	Q1	28	12	-	4