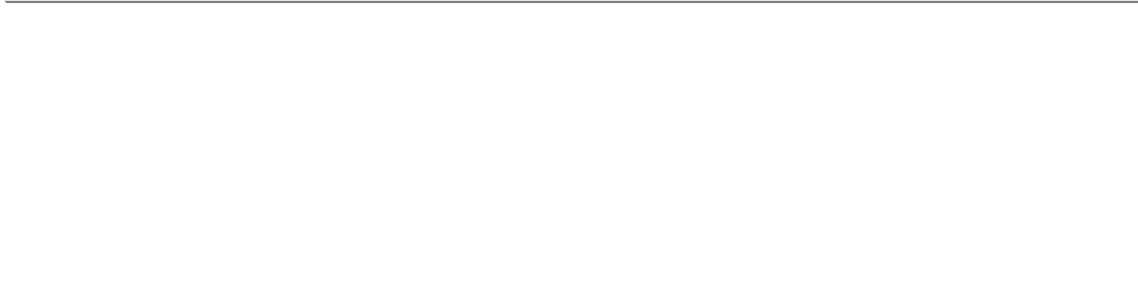




ENVI2MC
2024 - 2025

Interdisciplinary Advanced Master in Science and Management
of the Environment and Sustainable Development



ENVI2MC - Introduction

Introduction

Introduction

The Specialization Master in science and management of the environment and sustainable development trains graduates able to dialogue (to understand and to be understood) with experts from different disciplines involved in the management of environmental issues and sustainable development (economics, environmental sciences, ethical, societal and technical aspects in a systemic approach), and with all stakeholders. The master prepares them to make decisions and to take action to solve problems in the fields of environment and sustainable development. This training therefore entails a solid teaching sweeping covering all aspects related to natural sciences related to the environment, as well as economics, social, demographic, legal and political aspects, all related to the environment.

ENVI2MC - Teaching profile

Learning outcomes

The specialized master in science and management of the environment and sustainable development offers both recent graduate and experienced professionals the opportunity to learn the basics of environmental science, and the management of environmental issues, which are complex in nature and involve many disciplines. The master is organized to be accessible to graduates (master level) of all faculties, including the sector of science and technology, the sector of human sciences or the health sciences sector, as well as higher schools.

At the end of the training, the graduate in science and management of the environment will be able to contribute to the management of environmental issues: to investigate the problem and analyze it in its entirety, to summarize the positions of the various stakeholders, including experts, communicate them in an understandable way to all parties, synthesize and propose solutions, and argue them to reach a consensus between all stakeholders.

The student's program includes an upgrade based on his or her basic training. This upgrade aims at acquiring basic knowledge in the various disciplines involved in environmental issues: science and technology (chemistry, biology, ecology, computer science, statistics, geography ...) and human sciences (sociology, law, economics, philosophy, etc.).

Part of the program aims to address environmental issues through different disciplines (economics, law, politics, toxicology, science and technology). Finally, part of the program also aims to develop its ability to approach environmental issues between disciplines, integrating their respective contributions (interdisciplinary approach), and to seek and negotiate consensus solutions with different stakeholders.

of the curriculum :

ory common specific activities, disciplinary and interdisciplinary,
 disciplinary integrative activities,
 nship in a professional environment,
 nal report on the internship.

ary reinforcement activities. These activities allow students from different backgrounds to learn the basics in disciplines
 ot been the subject of their initial training. Students must have completed training in these various disciplines; they can be
 n the framework of the ENVI2MC Master if they have succeeded (> 12/20) equivalent courses at the university level.

m of courses chosen within a pre-established field or selected among courses offered in several fields

dual program must be approved by the program coordinator.

ENVI2MC Programme

Programme by subject

COURSES

- Mandatory
- ⊗ Optional
- △ Not offered in 2024-2025
- ⊙ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 👤 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- FR Teaching language (FR, EN, ES, NL, DE, ...)

[Click on the course title to see detailed informations \(objectives, methods, evaluation...\)](#)

Year

1 2

| | | | | Year | |
|-------------|---|---|----------------------------------|------|---|
| | | | | 1 | 2 |
| ○ LENVI2002 | Seminars in environmental science and management | Philippe Baret Hubert Bedoret (compensates Philippe Baret) Anne-Laure Jacquemart (coord.) Jean-Pierre Raskin Valérie Swaen | PK [q1] [15h] [2 Credits] | x | |
| ○ LENVI2101 | Societies, populations, environment, development: issues and interdisciplinary approaches | Martin Colla (compensates Caroline Nieberding) Nathalie Frogneux (coord.) Julie Hermesse Jean-Pierre Raskin | PK [q1] [45h] [6 Credits] | x | |
| ○ LENVI2099 | Projet personnel de fin d'études | | PK [q1+q2] [] [15 Credits] | | x |
| ○ LENVI2199 | Work placement | Dimitri Lederer | PK [q1 or q2] [15h] [30 Credits] | | x |

⌘ Unités d'enseignement au choix :

Les crédits des unités d'enseignement au choix viendront compléter le total des crédits des unités d'enseignement obligatoires pour atteindre au moins 120 crédits. Les étudiant-es peuvent choisir librement les unités d'enseignement proposés ci-dessous (attention aux horaires!). Les étudiant-e-s sont responsables de s'assurer qu'ils-elles disposent bien des bases nécessaires pour suivre les cours qu'ils-elles choisissent.

⌘

| | | | | Year | |
|---|--|---|--|------|---|
| | | | | 1 | 2 |
| ✂ LMAPR2001A | Project "chemical & materials engineering for a sustainable future" | Juray De Wilde Pascal Jacques Alain Jonas Patricia Luis Alconero Samuel Poncé | EN [q2] [22.5h+30h] [5 Credits] > French-friendly | x | x |
| ✂ LMAPR2647 | Sustainable treatment of industrial and domestic waste: Fundamentals | Olivier Françoisse Patricia Luis Alconero Olivier Noiset Benoît Stenuit | EN [q1] [30h+15h] [5 Credits] > French-friendly | x | x |
| ✂ Activités en climat : état, pression et réponses | | | | | |
| ✂ LBIR1328 | Climatology and hydrology applied to agronomy and the environment | Alice Alonso (coord.) Charles Bielders (coord.) Hugues Goosse | EN [q1] [45h+22.5h] [6 Credits] > French-friendly | x | x |

✂

Year

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⌘ Un cours au choix parmi les deux suivants :

| | | | | | |
|----------------|-----------------------------------|------------------|---------------------------------|---|---|
| ⌘ LDEMO2610 | Populations and health | Bruno Masquelier | PK [q1] [30h] [5 Credits] 🌐 | X | X |
| ⌘ WFSP2238P | Advanced epidemiology (UCLouvain) | Niko Speybroeck | PK [q2] [20h+16h] [4 Credits] 🌐 | X | X |

⌘ Activités d'intégration professionnelle et de diversification

Les étudiant-es qui voudraient suivre d'autres unités d'enseignement en lien avec l'environnement et le développement durable peuvent en faire la proposition au coordinateur.

| | | |
|------------|--------------------|--|
| ○ LBIR2004 | Masters Internship | Damien Debecker (coord.) Xavier DrayeXavier4u 1 0 0 1 45.039001 0 S Q q 1 0 0 1 -3.834 41.99599 d 2 w |
|------------|--------------------|--|

The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

A mastery of the French language of level B1 ([Common European Framework of reference for languages](#)).

1. Students holding a master's degree obtained in a country belonging to the European Union

a/ The following three criteria must be met simultaneously:

- the average grade for master's classes must be at least 70% (14/20);
- the grade for the final project (thesis/dissertation/internship) must be at least 70% (14/20);
- the final project (thesis/thesis/internship) of at least 15 credits must be the subject of a report and defence (viva) before a jury.

b/ These criteria may be waived on the basis of duly attested significant professional or personal experience.

2. Students holding a master's degree obtained in a country outside the European Union

a/ The following three criteria must be met simultaneously :

- the average grade for master's classes must be at least 75% (15/20);
- the grade for the final project (thesis/dissertation/internship) must be at least 75% (15/20);
- the final project (thesis/thesis/internship) of at least 15 credits must be the subject of a report and defence (viva) before a jury.

b/ These criteria may be waived on the basis of duly attested significant professional or personal experience.

Teaching method

The programme for the Master in Science and Management of the Environment and Sustainable Development includes a group of courses which are designed to provide students with basic knowledge of the different disciplines involved in the management of environmental problems and of sustainable development. A significant proportion of the courses are organized by different partner faculties. In this way, courses are given by specialists of each discipline.

The training programme focuses particularly on training students to use their knowledge and skills, through different kinds of individual and group works and also through a wide roleplay project (LENVI 2101, 6 credits), during which students have to investigate and deal with the many different aspects of a real environmental problem; they have then to negotiate the technical, socio-economic and institutional solutions between all the involved parties (stake-holders).

The professional internship and its report are a final achievement of the training, allowing students to put their knowledge and skills into practice to solve real environmental issues.

Evaluation

The evaluation methods comply with the [regulations concerning studies and exams](#). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

Examinations for each activity. The precise form is outlined, when necessary, in the relevant course specification.

Mobility and/or Internationalisation outlook

There is an active exchange agreement with the University of Sherbrooke (Quebec, Canada).

The programme traditionally welcomes international students.

Possible trainings at the end of the programme

Although it is open to certain bachelors, the Master in Science and Management of the Environment and Sustainable Development follows any first Master (120) in human sciences, applied sciences and technologies or health sciences. Its strong interdisciplinary nature will provide second cycle students who wish to have a professional career in environment with useful additional knowledge in the areas of science and integrated management of environmental issues.

This Master does not specifically lead to enter PhD studies without a more specifically research oriented master.

Contacts

Toute information complémentaire à propos de ce master est à adresser au coordinateur du programme, Prof. P. Gerin, Croix du Sud 2, L7.05.19, 1348 Louvain-la-Neuve, coordenvi@climate.be.

Curriculum Management

Faculty

Structure entity

Denomination

Sector

Acronym

Postal address

SST/AGRO

Faculty of bioscience engineering ([AGRO](#))

Sciences and Technology ([SST](#))

AGRO

Croix du Sud 2 - bte L7.05.01

1348 Louvain-la-Neuve

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<http://www.uclouvain.be/agro>

Website

Mandate(s)

- Dean : Christine Dupont
- Administrative director : Carole Dekelver

Commission(s) of programme

- Commission de programme - Master Bioingénieur-Sciences agronomiques ([BIRA](#))

