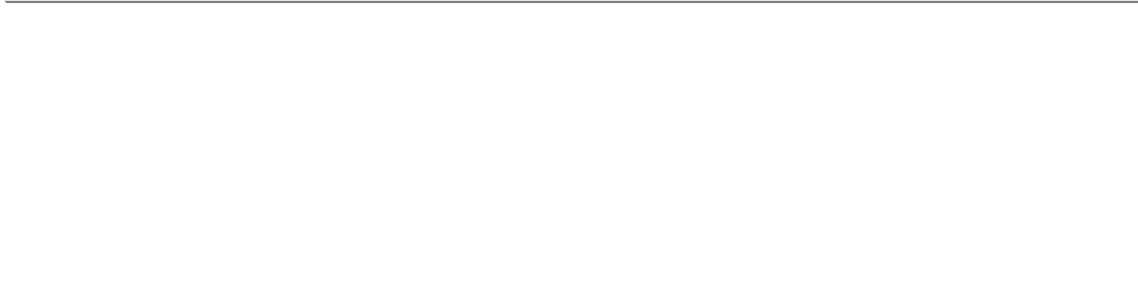




ENVI2MC
2023 - 2024

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



ENVI2MC - Introduction

Introduction

ENVI2MC - Teaching profile

Learning outcomes

A general presentation of the interdisciplinary specialized master in science and management of the environment and sustainable development is available on the portal of the [Faculty of Bioscience engineering](#).

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 ...).

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.

On successful completion of this programme, each student is able to :

1. To analyse the scientific, technical and non-technical dimensions of an environmental problem.
 - 1.1 To identify the stakeholders concerned by the environmental issue: the general public, scientific experts, non-governmental organisations, public authorities, companies, etc.
 - 1.2 To gather and synthesize information, in French and English, on the various dimensions of the environmental issue: scientific, technical/technological, human, etc.
 - 1.3 To use basic theoretical concepts in science and technology in an appropriate manner: chemistry, biology, ecology, toxicology, IT, statistics, geography, etc. related to the environmental issue.
 - 1.4 To use basic theoretical concepts in human sciences in an appropriate manner: sociology, philosophy, law, economics, etc. related to the environmental issue.
 - 1.5 To communicate with different stakeholders and with independent experts, to identify the elements underlying their respective viewpoints and to incorporate them into the analysis.
 - 1.6 To establish links between the basic concepts in science and technology and the human sciences to understand and explain the environmental issue as a whole.
 - 1.7 To work with colleagues to interpret all the aspects and facets of the environmental issue.
2. To construct and develop one or more solutions to tackle the environmental issue, taking into account the technological and non-technological aspects.
 - 2.1 To synthesize various types of documents related to an environmental issue (scientific and technical / technological and humanities)
 - 2.2 To summarise the views of stakeholders involved in the environmental issue.

Programme structure

Learning Outcomes

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


				Year	
				1	2
⊗ LBIR1271	Projet intégré en informatique et mathématiques appliquées	Patrick Bogaert Emmanuel Hanert (coord.) Marnik Vanclooster	PO [q2] [30h+30h] [5 Credits] 	x	x
⊗ LECGE1215	Information Technology in Economics and Management	Manuel Kolp Marco Saerens	PO [q2] [30h+20h] [4 Credits] 	x	x
⊗ Statistiques et analyse des données : un cours au choix					
⊗ LBIO1283	Statistical principles and biological data analysis	Nicolas Schtickzelle	PO [q2] [30h+40h] [4 Credits] 	x	x
⊗ LBIR1212	Probabilities and statistics (I)	Patrick Bogaert			

⌘ Activités en santé publique et environnement

⌘ LGEO2230

Medical and health geography

Sophie Vanwambeke

10 [q1] [30h+30h] [5 Credits] 

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.

- Commission de programme - Master Bioingénieur-Chimie et bioindustries ([BIRC](#))
- Commission de programme - Master Bioingénieur-Sciences & technologies de l'environnement ([BIRE](#))
- Commission de programme - Bachelier en sciences de l'ingénieur, orientation bioingénieur ([CBIR](#))
- Commission de programme interfacultaire en Sciences et gestion de l'environnement ([ENVI](#))
- Fermes universitaires de Louvain ([FERM](#))

Academic supervisor: [Patrick Gerin](https://uclouvain.be/repertoires/patrick.gerin) (<https://uclouvain.be/repertoires/patrick.gerin>)

Jury

- Président de jury: [Quentin Ponette](https://uclouvain.be/repertoires/quentin.ponette) (<https://uclouvain.be/repertoires/quentin.ponette>)

Useful Contact(s)

- Conseiller aux études: [Patrick Gerin](https://uclouvain.be/repertoires/patrick.gerin) (<https://uclouvain.be/repertoires/patrick.gerin>)

