ENVI2M - Introduction

Introduction

ENVI2M - Teaching profile

Learning outcomes

The Masters in Environmental Sciences and Management is offered as a priority to students who have completed a Masters level course of study at one of the faculties in the science and technology sector, human sciences sector or health sciences sector, or at a college of further education. The admission requirements are those of an advanced Masters.

Teaching on environmental sciences and management offers both graduate students and professionals the opportunity to learn about the basic principles of environmental sciences and the management of environmental problems that are complex by nature and involve several disciplines.

The student programme is partially tailored to suit their initial training. Part of the programme is aimed at allowing them to acquire basic knowledge in the various disciplines involved in environmental issues, in science and technology (chemistry, biology, ecology, IT, mathematics, statistics, geography...) and in human sciences (sociology, law, economics, philosophy...). Part of the programme is intended to address environmental issues through various disciplines (economics, law, politics, toxicology, science and technology). Finally, part of the programme is designed to develop the ability to approach environmental issues across disciplines, integrating their respective contributions (multidisciplinary approach) and to identify and negotiate consensual solutions with the different stakeholders.

Upon completion of the programme, the Master of Environmental Sciences and Management will be able to take a mediating role, alone or within a team, to resolve environmental issues: to gain an understanding of the problem and to analyse it as a whole, to summarise the positions of the various stakeholders, including experts, to communicate these comprehensibly to all parties, to develop and propose consensual solutions, to argue and negotiate with 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 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, mathematics, statistics, geography, etc. related to the environmental issue.

1.4 To use basic theoretical concepts in the 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 these into the analysis.

1.6 To establish links between the basic concepts in science and technology and the humanities to 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, factoring in the technological and non-technological aspects.

2.1 To summarise different 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.

2.3 To develop innovative proposals for solutions to the environmental issue with the support of stakeholders, by combining the data and scientific, technical / technological and non-technical methods available.

2.4 To select proposals for solutions in as substantiated way (self-evaluation) that best fulfil the different dimensions of the environmental issue (scientific, technical / technological and non-technical).

2.5 To identify with different stakeholders and, in relation to each of them, to decipher their views and positions with regard to the environmental issue and anticipate their reactions to new data and proposals.

2.6 To evaluate solutions against all criteria (feasibility, consistency, stakeholders, etc.) and dimensions (scientific, technical / technological and humanities).

3. To communicate the proposed environmental solutions to the stakeholders.

3.1 To present the analysis of the environmental problem and the proposed solutions verbally and in writing, in a substantiated manner using modern communication techniques.

3.2 To adapt their language and vocabulary specifically taking the cultural differences of the conversational partners into consideration: colleagues, general public, scientific experts, non-governmental organisations, public authorities, businesses, etc.

4. To negotiate a consensual solution between environmental stakeholders, based on the various solutions proposed.

4.1 To interpret the views of stakeholders on the environmental issue.

4.2 To arbitrate the views of stakeholders on the environmental solutions.

4.3 To convince stakeholders of a common solution to the environmental issue through argumentation.

4.4 To make choices, alone or within a team, taking account of all the dimensions and all the stakeholders, with a view to reaching a consensual solution.

			Year 1	Year 2
Activités communes obligatoires				
Pour 53 crédits minimum :				
LENVI2199	Work placement	FR [q1 or q2] [15h] [30 Credits]		x
LENVI2099	Projet personnel de fin d'études	FR [q1+q2] [] [15 Credits]		x
LESPO2103	Environment and Global Economy			
Une activité au choix parmi les intitulés suivants :				
⊠ LBRTE2201	Human and environmental toxicology	Cathy Debier	x	
		FR [q1] [30h+7.5h] [5 Credits] *> French-friendly*		
Mandatory subjects				
Rem 1: L'étudiant(e) doit choisir un cours dans chacune des disciplines suivantes, s'il(elle) n'a pas réussi dans sa formation universitaire antérieure un cours qui aura été jugé équivalent, sachant que le total des crédits de son programme devra atteindre 120 crédits pour l'ensemble du master. Ce choix devra être soumis à l'approbation du coordinateur du programme. Rem 2: L'étudiant(e) veillera à s'assurer qu'il/elle dispose des bases nécessaires pour suivre les activités choisies.				
⊠ Biology: one course to be chosen				
Certaines des activités proposées pourront être suivies en partie.				
⊠ LBIO1114	Introduction to biology	Patrick Dumont	x	x
		FR [q2] [30h+7.5h] [3 Credits]		
⊠ LPSP1005	General biology, including elements of human genetics	François Chaumont Patrick Dumont Charles Hachez	x	x
		FR [q1] [30h] [4 Credits]		
⊠ Chemistry: one course to be chosen				
Certaines des activités proposées pourront être suivies en partie.				
⊠ LBIR1140	Chimie générale 1	Pierre Delmelle (coord.) Charles-André Fustin Michel Ghislain (coord.)	x	x
		FR [q1] [30h+30h] [6 Credits]		
⊠ LFSM1101	General chemistry and biomolecules	Patrick Henriet		
		FR		

				Year 1	2

⛒ Sociology: one course to be chosen
Le cours LPSP1007 est recommandé.

⛒ LPOLS1121	Sociologie du comportement politique	Nicolas Bocquet (compensates Benoît Rihoux)	FR [q2] [22.5h] [4 Credits]	x	x
⛒ LPSP1007	Sociology: education, health and work	Marc Zune	FR [q1] [30h] [3 Credits]	x	x
⛒ LDROI1221	Introduction to Sociology	Nicolas Bocquet (compensates Benoît Rihoux) John Cultiaux (compensates Laura Merla)	FR [q1] [45h] [3 Credits]	x	x

⛒ Geography: one course to be chosen
L'étudiant peut éventuellement choisir d'autres activités de Géographie en fonction des prérequis dont il dispose.

⛒ LGEO1221	Elements of human geography	Sophie Vanwambeke	FR [q1] [30h+30h] [5 Credits]	x	x
⛒ LGEO2110	Mondialisation, développement et environnement	Eric Lambin	FR [q1] [30h+30h] [5 Credits]	x	

				Year 1	Year 2
⛒ Anthropologie					
⛒ LDVLP2320	Anthropology of development and environment	Aurore Vermylen (compensates Emmanuelle Piccoli)	FR [q1] [30h] [5 Credits]	x	x

⛒

PROFESSIONAL FOCUS [30.0]

Un coeur de formation interdisciplinaire, spécifique et original (Finalité spécialisée) Un ensemble de cours, dédicacés aux sciences environnementales et aux approches interdisciplinaires de gestion des problématiques environnementales et du développement durable. Ces cours sont rassemblés dans le tronc commun obligatoire et dans la finalité spécialisée. Un stage réalisé en milieu professionnel, à l'extérieur de l'université, amenant les étudiants à mettre en pratique leur formation théorique dans des situations

Year

OPTION 2 : AGRICULTURE AND ENVIRONMENT

- 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

OPTION 3: LAND DEVELOPMENT AND ENVIRONNEMENT

- O Mandatory
- ⊠ Optional
- △ Not offered in 2024-2025
- ⊘

OPTION 4: PUBLIC ADMINISTRATION AND ENVIRONMENT

- 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

OPTIONAL 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...)

From 15 to 30credit(s)

Year
1 2

Content:

Activité d'enrichissement personnel

Les étudiants peuvent effectuer un stage supplémentaire. Ce stage fait partie intégrante du programme et ne fera l'objet ni de crédits ni d'évaluation. Cette activité est couverte par l'assurance de l'université.

Course prerequisites

There are no prerequisites between course units (CUs) for this programme, i.e. the programme activity (course unit, CU) whose learning outcomes are to be certified and the corresponding credits awarded by the jury before registration in another CU.

Vu le caractère interdisciplinaire de ce master qui par ailleurs, est très largement accessible aux détenteurs d'un grade de master de tous les domaines, une partie du programme consiste en une liste de cours de base proposés au choix. En fonction du grade de master dont il est porteur et des éventuelles dispenses qui pourront lui être octroyées, l'étudiant inscrira à son programme 0 à 21 crédits de cours repris dans cette liste. Ces cours feront bien sûr partie intégrante de son programme.

Holders of a non-University 2nd cycle degree

Access based on validation of professional experience

> It is possible, under certain conditions, to use one's personal and professional experience to enter a university course without having the required qualifications. However, validation of prior experience does not automatically apply to all courses. Find out more about Validation of priori experience.

Access based on application

Access based on application : access may be granted either directly or on the condition of completing additional courses of a maximum of 60 ECTS credits, or refused.

Admission and Enrolment Procedures for general registration

L'étudiant doit avoir obtenu au moins 70% des points ou une mention équivalente lors de l'obtention du diplôme qui lui permet d'accéder au master. En outre, son dossier de candidature sera soumis à l'approbation de la commission de gestion du programme.

Academic supervisor: Patrick Gerin

Jury

- Président de jury: Charles Bielders

Useful Contact(s)

- Conseiller aux études: Patrick Gerin