



## Master in Agroecology

### Programme mnemonic

MA-AGEC

> Focus *Professional* : M-AGEC

### Studies level

Master 120 credits

### Learning language

french

### Schedule

office hours

### Studies category / subcategory

Sciences and technics / Agronomy and bioengineering

### Campus

Plaine and Solbosch

- > in-depth knowledge of the structures and the biological and ecological processes involved in agro-ecosystems, taking into account factors related to the soil, plants, animals, and climate;
- > analysing agroecological transition processes and understanding the co-evolution trajectories of the various players involved, the obstacles in play, the degree of change, socio-technical innovations, and issues of governance.
- > a diverse portfolio of strategies, experiences, and case studies that are relevant to agroecology.

## Programme's added value

The inter-university Master in Agroecology is offered jointly by three institutions, and spread out across four campuses. Classes given at ULB are already part of the programme of the Interfaculty Bioengineering School (EIB) and that of the Faculty of Social and Political Sciences (FSSP). With this Master programme, ULB can be a comprehensive university in Europe's capital.

## Programme objectives

The purpose of agroecology is to develop safe, sustainable, and fair systems of food production, by integrating ecological and social perspectives into the basics of farming.

This is a new paradigm in the way we think, innovate, and organise in the context of farming and food systems, in order to respond to the various crises (climatic, economic, environmental, energetic, social, and health-related) that lead us to question the sustainability of current food systems.

This model requires interdisciplinary approaches in order to fully understand the complexity of farming systems and broader food systems.

A change of this magnitude will require a huge number of professionals such as technical advisors, researchers, or trainers, who can help throughout the agroecological transition process.

Upon graduation, students will be able to conduct both qualitative and quantitative analyses of complex and dynamic agro-ecosystems. They will be able to provide a holistic description of farming socio-ecosystems, using a multidisciplinary approach.

The programme's content includes:

- > insight into the environmental, social, and economic challenges of agro-ecosystems in a European and tropical setting;

## Teaching methods

Courses are designed to confront students with conditions that are similar to those that exist in farming and in agroecological research, through projects, case studies, field visits, and real-world applications.

Many of the teaching activities include both personal and group assignments. Students learn actively, which promotes one of the programme's main goals: train graduates who are active agents of change.

The culmination of this active learning process are the internship and final project, both of which let students discover the professional world of agroecologists.

Finally, a number of courses are given in English, in order to immerse students in an international linguistic context that will help their career in the future.

The goal of the Master in Agroecology is to train professionals who implement the agroecological transition in temperate or tropical environments.

The final project covers a specific research topic that the student wishes to look into, in relation with their own professional project.



## Succeed in your studies

### Choose

The information and guidance counsellors at the InfOR-études [<https://www.ulb.be/en/studies-info-desk-1>] service will help you choose your studies throughout the year.

### Succeed

Take part in preparatory courses [<https://www.ulb.be/en/studies-info-desk-1>] or get help to succeed [<https://www.ulb.be/en/studies-info-desk-1>], before or during your studies.

### Get help

Apply for financial aid, look for accommodation or a student job, get support [<https://www.ulb.be/fr/aides-services-et-accompagnement/aid-services-and-support-1>] for your specific needs.

## Job opportunities

The goal of the Master in Agroecology is to train professionals who implement the agroecological transition in temperate or tropical environments.

Their expertise can be leveraged in a number of areas:

- > farming research institutions;
- > universities;
- > international organisations (FAO, CGIAR, etc.);
- > governmental and non-governmental organisations active in supporting and advising all kinds of actors involved in farming

### Contacts

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### Jury President

Marjolein VISSER

### Jury Secretary

Nicolas VERECKEN



# Master in Agroecology

## Focus Professional

The programme is organised into four main teaching modules, worth 23 to 33 credits:

MODULE 1 – 1st term: covers the social sciences involved in the agroecological transition (classes given on ULg's campus in Arlon).

MODULE 2 – 2nd term: covers agroecological production systems and techniques, and ecosystem services (classes given on ULg's campus in Gembloux, and at ULB).

MODULE 3 – 3rd term: covers agro-ecosystem regulation and modelling at the scale of a single plot of land and at the scale of a region (classes given at AgroParisTech).

Module 3 can be substituted for a series of courses at ULB and ULg that will delve more into economic, policy and food challenges, while also tackling livestock and crop production techniques that are specific to agroecology.


MODULE 4 – 4th term: final project.

## Bloc 1 | M-AGEC | MA-AGEC

### Cours ULB



Ci-dessous, vous trouverez les unités d'enseignement organisées à l'ULB. Pour avoir accès au programme complet, veuillez consulter le site suivant : [https://www.programmes.uliege.be/cocoon/20202021/programmes/R2UAEC01\\_C.html](https://www.programmes.uliege.be/cocoon/20202021/programmes/R2UAEC01_C.html)

Les cours BING-F202, SOCA-D482, BING-F305, BING-F430 sont obligatoires. Les cours BING-F431, BING-F4001, SOCA-D550, SOCA-D471, BING-F416, ENVI-F454, BING-F4006 sont proposés à titre optionnel.

BING-F202 [Agro-écosystèmes et systèmes agraires](#) | Marjolein VISSER (Coordinator) and Amaury Beaugendre  
 5 credits [lecture: 36h]  second term  French



BING-F305 [Agro-écologie](#) | Marjolein VISSER (Coordinator)  
 5 credits [lecture: 30h, field trips: 12h]  first term  French


BING-F4001 [Economie agricole](#) | Werner BOSMANS (Coordinator)  
 5 credits [lecture: 18h, tutorial classes: 12h]  second term  French

BING-F4006 [Génétique des populations et amélioration des plantes](#) | Olivier HARDY (Coordinator), Christian HERMANS and Marjolein VISSER  
 5 credits [lecture: 48h, tutorial classes: 6h]  second term  French

BING-F416 [Stage d'immersion agricole](#) | Marjolein VISSER (Coordinator), François SERNEELS and Cécile Thonar  
 5 credits [field trips: 60h]  first and second terms  French


BING-F430 [Agroécologie et écologie de la conservation](#) | Nicolas VERECKEN (Coordinator) and Grégory MAHY  
 5 credits [lecture: 36h, tutorial classes: 12h, project: 20h]  first term  French

BING-F431 [Innovations agroécologiques et production alimentaire](#) | Nicolas VERECKEN (Coordinator)  
 5 credits [lecture: 36h, practical work: 12h, project: 20h]  first term  French

ENVI-F454 [Energie: Société et environnement](#) | Michel HUART (Coordinator) and Nadine MATTIELLI  
 5 credits [lecture: 30h, practical work: 12h, project: 24h]  first term  French

SOCA-D471 [Agricultures, ruralités et mondialisation](#) | Laurence ROUDART (Coordinator) and Werner BOSMANS  
 5 credits [lecture: 24h]  first term  French

SOCA-D482 [Sécurité alimentaire mondiale](#) | Laurence ROUDART (Coordinator)  
 5 credits [lecture: 24h]  second term  French

SOCA-D550 [Structures économiques et sociales des mondes ruraux](#) | Laurence ROUDART (Coordinator)  
 5 credits [lecture: 24h]  second term  French