

Master

AGROECOLOGY

MENTION AGROSCIENCES, ENVIRONMENT TERRITORIES, LANDSCAPE, FOREST

CONTEXT AND OBJECTIVES

The Master's programme in Agroecology combines an interdisciplinary approach with an international focus. Drawing on ecology, economics, social sciences, plant and animal sciences, and soil sciences, it examines agricultural systems that integrate crop and livestock production. Particular attention is given to optimizing the environmental and socio-economic interactions between crops, livestock, natural environments, biodiversity, and human societies.

The curriculum is informed by the latest research, providing students with up-to-date knowledge of developments in agroecology and a strong foundation for a research career.

Upon completion of the programme, graduates will be able to:

- Analyse the socio-economic and environmental challenges facing agricultural production systems from an integrated and strategic perspective;
- Apply knowledge of the interactions between farming practices, natural environments, biodiversity, and socio-economic stakeholders to improve production systems and support the agroecological transition;
- Identify relevant levers for action and facilitate dialogue between disciplines to assess the environmental, economic, social, and societal impacts of agroecological transitions;
- Conduct research combining natural regulation processes and human intervention to reconcile agricultural production with environmental sustainability.

Campus

Angers ○ Rennes ●

Initial Education ●

Executive Education ●

Common courses with :

« Agroecology » engineering specialisation at l'Institut Agro Rennes-Angers ●

L'Institut Agro Rennes-Angers

Supports

One-stop administrative desk for international students ●
French language courses for non-native students ●
Housing support, local options on campus ●
Tutorat support ●

OCCUPATION AND SECTORS OF ACTIVITIES

- + Study Engineer or Researcher (following the completion of a PhD) within research organizations or in the R&D departments of companies
- + Project Officer within companies or associations leading agroecological projects
- + Project Officer or Research/Policy Analyst within national government administrations, public organizations, or semi-public institutions
- + Agronomy, Environment, and Territorial Planning Advisor/Consultant within Agricultural Professional Organizations, NGOs, and Associations
- + Journalist
- Chambers of Commerce and Technical
- Institutes Territorial Management Institutions
- Engineering consultancies
- Local and regional authorities
- Agricultural Development
- Civil Society Groups and Higher Education Institutions
- Associations and Foundations
- Large companies

Master

AGROECOLOGY

**MENTION AGROSCIENCES, ENVIRONMENT
TERRITORIES, LANDSCAPE, FOREST**

PROGRAMME CONTENT

The formation is based on a:

- Interdisciplinarity: rural economics and sociology, soil science, plant health, animal science...
- Systemic approach to these issues at the territorial level
- Project-based learning in collaboration with professional partners.

MASTER 1 | SEMESTER 7 | 30 ECTS

- | | |
|---|--------|
| — From data acquisition to analysis and interpretation | 9 ECTS |
| — Systems in transition | 8 ECTS |
| — The agricultural engineer in his professional environment | 6 ECTS |
| — Interdisciplinarity to think about and lead transformations | 7 ECTS |

MASTER 1 | SEMESTER 8 | 30 ECTS

4 Teaching Units (UE) - 11 ECTS

UE 1 • Common Core

- Multidimensional data analysis
- Risk concepts: assessment, management, and prevention
- Foreign languages: English (mandatory)

UE 2 • Personalized Pathways

- Innovative project management
- Management / Communication
- 2 out of 4 elective modules

UE 3 • Advanced Study 1

- Social construction of environmental issues and interdisciplinarity
- 4 out of 12 elective modules

UE 4 • Advanced Study 2

- From field to GIS: spatial analysis of environments and landscapes 1 & 2
- Multidisciplinary project: agroecological assessment 1 & 2
- 2 out of 6 elective modules

MASTER 2 | SEMESTER 9 | 30 ECTS

6 Teaching Units (UE)

Course delivered entirely in English

UE 1 • The challenges of Agroecology and Bibliographical reports

UE 2 • Socio-economical analysis

UE 3 • Theoretical bases of agroecosystem functioning (ecology, soil quality, landscape management and biological flows, basic animal and livestock farming, modelling)

UE 4 • Sustainability of agroecological systems

UE 5 • Agroecosystem management levers in Agroecology (management of forage resources, soil quality, plant health, plant breeding)

UE 6 • Prospective vision of agro-ecological trajectories for sustainable agriculture

UE 7 • Statistical and spatial engineering tools (statistic, SIG)

UE 8 • Professional Project

UE 9 • Languages

MASTER 2 | SEMESTER 10 | 30 ECTS

Master's thesis

ADMISSION

Open only to:

- International students
- French students in continuing education

A B2-level certificate in English is necessary to follow the Agroecology Master programme.

Admissions are possible at the Master 1 and Master 2 levels.

ACADEMIC REFERENTS

safya.menasseri@institut-agro.fr
guenola.peres@institut-agro.fr

EXECUTIVE INFORMATION

hussein.almohammad@institut-agro.fr

ADMINISTRATIVE INFORMATION

master@agrocampus-ouest.fr