SPECIALIZATION: SMART FARMING AND SUSTAINABLE AGRICULTURE

LEVEL: MASTER 2
PERIOD: SEMESTER 1
LANGUAGE: EN
ECTS: 30
TEACHER/COORDINATOR: BERTRAND VANDOORNE - HERINAINA ANDRIAMANDROSO

1- Objectives and professional skills developed

The main objectives of this specialization are to understand new issues in agriculture and develop a working method to accompany farmers and companies in their changing environment.

For the next year: to be operational in the support of farmers.

For the next 40 years: to be an actor of sustainable agriculture through diverse sectors and territories.

This specialization will train students to:

› Discover, understand and analyse innovative and sustainable agronomic methods in animal and plant production

› Understand and manipulate the technologies of digital agriculture at the service of the sustainability of agricultural systems.

2- Content and organisation

Different teaching modules (for 50 days) will be organised by the teachers of ISA's Department of Agricultural Science with numerous professional guest lectures. The objective is to span the different environmental, technical and economic approaches in animal and plant production.

A development and innovation project (for 40 days) will be assigned to students in partnership with a company or organization. This project corresponds to a real demand and the students (in groups) are in a situation of obligation of result.

For some groups, according to the needs of the project, students from partner schools HEI and/or ISEN will also be able to bring their skills to solve the problem.

3-Evaluation

Different evaluation methods will be used and equally distributed between:

› Individual written evaluations

› Group works

› Evaluation based on the participation and professional attitude

4- The training modules

The main topics addressed during the training will be:

1. **Tools for supporting farming and farmers**: Farm strategy, consulting and projects (10 days)

2. **Agriculture and society:** Societal issues around technology (5 days)

3. **Professional skills**:
› Agriculture and Water (5 days)

› Agriculture and territories (3 days)

› Innovative and sustainable cropping systems (10 days)

› Precision Agriculture (20 days)

4. **Group project** (40 days)