


# FARMING FOR THE FUTURE

PLUS D'INFORMATIONS :



 Rouen

 English

## CONTENT & GOALS

By following this programme, students will learn how to Develop an alternative, adaptive, creative agriculture to meet the challenges of climate change, biodiversity loss and global food insecurity.

## KEY SKILLS DEVELOPED

- Alternative agriculture: identifying the impact of agriculture on the environment, finding and providing methods and advice to implement better land use, developing new or improved technologies for livestock and/or crops to ensure yield, quality, disease resistance, nutritional value, all using environmentally friendly methods
- Adaptive agriculture: develop sustainable solutions for agriculture taking into account the current global warming, with a special focus on soil management, develop natural resource management plans, within the framework of national regulatory requirements
- Creative agriculture: designing innovative crop-livestock agrosystems of and for the world, redesigning or improving the supply chain to ensure food security

## DATES OF THE PROGRAMME

1<sup>st</sup> semester: End of August-End of January

2<sup>nd</sup> semester: End of January- Beginning of June

This programme is taught in English both during the Fall & Spring semester

## PROGRAMME OVERVIEW\*

### FALL SEMESTER (4<sup>TH</sup> YEAR PROGRAMME – MASTER LEVEL)

SMART AND LOW-INPUT AGRICULTURE: ALTERNATIVE AGRICULTURES	ECTS
<b>UE 1 - Common courses</b> (including: Management, risk prevention & occupational integration / economic intelligence and project management / innovation, life cycle analysis and digital culture)	5
<b>UE 2 - Ecology and environmental issues Agro-ecological engineering</b> (including: Environmental challenges in agriculture / Agroecological engineering / Environmental policies / Alternative agricultures / Masterclass: "Bassin versant")	7
<b>UE 3 - Breeding, Agtech and biotech for crop production and Livestock</b> (including: Breeding for life/ AgTech and BioTech for Crop / AgTech and BioTech for livestock / MasterClass: Microbiome)	7
<b>UE 4 - Project</b>	5
<b>UE 5 - Minor</b> - Sustainable weed management OR UE 5 - Minor - Agroecological pest management OR UE 5 - Minor - Global Environmental Issues OR UE 5 - Minor - French as second language	3
<b>UE 6 - Minor</b> - Study Trip OR UE 6 - Minor Bio-inputs Alternative and connected agriculture	3

## PROGRAMME OVERVIEW\*

### SPRING SEMESTER (4<sup>TH</sup> YEAR PROGRAMME – MASTER LEVEL)

GLOBAL WARMING AND SMART ADAPTATIVE SYSTEMS	ECTS
<b>UE 1 – Common courses</b> – (including: Management, risk prevention occupational integration / Projects, business plan and information systems / Specific common core)	4
<b>UE 2 - Global climate smart agriculture</b> (including: Valorisation of adaptative agriculture / Low carbon inputs / Climate Smart Agriculture / Understand the climate projections as agronomic tools / Masterclass: « Etude Agroclimatique territoriale»)	5
<b>UE 3 - Smart and Sustainable Land Use</b> (including: Fundamentals of land use planning / Natural resource management / Geographical Information Systems / Smart solutions for sustainable land-use / Masterclass: Sustainable renewable Energy use)	5
<b>UE 4 - Project</b>	4
<b>UE 5 - Minor</b> - Bioindicators for soils OR UE 5 - Minor - Energy sustainability in farms	3
<b>UE 6 - Minor</b> -Study Trip OR UE 6 - Minor - Conservation OR UE 6 - Minor - Organic farming	3
<b>UE 8 - To build and to project yourself for a sustainable world</b>	6