

## BIP PROPOSAL

### TITLE

Digital transformation of agro-companies

### COORDINATING HEI & MAIN COORDINATING INSTRUCTOR

University of Almería

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### LEARNING OBJECTIVES OF THE BIP

The EU-UK Declaration of Cooperation on Digital Agriculture states that the digitization of the European agricultural sector has the potential to revolutionize the industry, promoting efficiency, sustainability and competitiveness.

But SMEs in this sector still have a lot of room to boost their competitiveness through the use of data, artificial intelligence, e-commerce and other technological trends.

Therefore, the **main objective** of this course is to help future leaders of agro companies understand the importance of committing to digital transformation and how to carry it out in order to boost their businesses and make them much more competitive and sustainable.

The **learning objectives** are:

- To understand that a company needs to increase its digital maturity to be competitive and to do so it should implement IT governance, digitization and digital transformation initiatives, all together.
- Knowing best practices for good IT governance and understanding that good IT governance is a key contributor to the success of digital transformation.
- To know the main information systems that an agro-company can use to digitize and which are the emerging technologies available to carry out its digital transformation.
- Discover success cases of agro-companies from all over the world that have carried out their digital transformation and have become Smart Agro Companies.
- Understand what steps an agro company needs to take to digitally transform itself and design a set of recommendations to digitally transform a real company.

### TARGET PARTICIPANTS (Study cycle, area, language requirements, etc.):

The target audience for this course are **undergraduate, master and doctoral students** in the fields of Agriculture, Food and Computer Engineering.

They need an English B2 certification or similar skills in English.

## PARTNER HEIs

We're hoping to receive around 25 students in total from all our partners – Therefore, we should be able to host at least 4-5 students from each of the follow partners:

- AGRICULTURAL UNIVERSITY OF ICELAND  
[evahlin@lbhi.is](mailto:evahlin@lbhi.is)
- AGRICULTURAL UNIVERSITY-PLOVDIV  
[svetla20@hotmail.com](mailto:svetla20@hotmail.com) and [inter@au-plovdiv.bg](mailto:inter@au-plovdiv.bg)
- HAUTE ÉCOLE DE LA PROVINCE DE LIÈGE [pauline.Bacquelaine@provincedeliege.be](mailto:pauline.Bacquelaine@provincedeliege.be) and [morgane.Lamoureux@hepl.be](mailto:morgane.Lamoureux@hepl.be)
- POLYTECHNIC UNIVERSITY OF COIMBRA  
[dulce.caetano@ipc.pt](mailto:dulce.caetano@ipc.pt)
- SUP'BIOTECH ENGINEERING SCHOOL OF BIOTECHNOLOGY  
[lara.haji-sleiman@supbiotech.fr](mailto:lara.haji-sleiman@supbiotech.fr) and [samuel.amsellem@supbiotech.fr](mailto:samuel.amsellem@supbiotech.fr)
- UNIVERSITY OF MODENA AND REGGIO EMILIA  
[barbara.villani@unimore.it](mailto:barbara.villani@unimore.it)
- WARSAW UNIVERSITY OF LIFE SCIENCE  
[ewelina\\_belkiewicz@sggw.edu.pl](mailto:ewelina_belkiewicz@sggw.edu.pl) and [joanna\\_zach@sggw.edu.pl](mailto:joanna_zach@sggw.edu.pl)

*Institutions invited but not yet accepted for participation*

## TEACHING TEAM (Who will teach the BIP)

Antonio Fernández Martínez (4 h.)  
Departamento de Informática  
University of Almería  
[afm@ual.es](mailto:afm@ual.es)

Juan Jesús Ojeda Castelo (4 h.)  
Departamento de Informática  
University of Almería  
[Juanje.Ojeda@ual.es](mailto:Juanje.Ojeda@ual.es)

Carlos Juiz García (4h.)  
Departamento de Arquitectura y Tecnología de Computadores  
Universidad de las Islas Baleares  
[cjuiz@uib.es](mailto:cjuiz@uib.es)

Pascual Romera Velasco (4h.)  
Founder and Sales Manager  
Hispace Agroiintelligence ([www.hispatec.com/en/](http://www.hispatec.com/en/))  
[Pascual.Romera@hispatec.es](mailto:Pascual.Romera@hispatec.es)

Enrique de los Ríos (4h.)  
General Manager  
Unica Group (<https://unicagroup.es/en/>)  
[edelosrios@unicagroup.es](mailto:edelosrios@unicagroup.es)

## PHYSICAL MOBILITY ACTIVITIES (What will the participants do during the physical mobility?)

**20 in person hours** have been programmed in **5 days of the same week**:

### Day 1 (4h.)

- Digital maturity of an enterprise
- How to implement the digital transformation of an enterprise
- Information systems for an agro-enterprise: ERP, CRM, BPM, etc.
- Emerging technologies to digital transformation: big data, blockchain, IA, machine learning, drones, RPA, etc.

### Day 2 (4h.)

- ISO 38500 Corporate governance of IT
- Successful of the digital transformation relies on good IT governance
- Best practices of IT governance for an agro-enterprise

### Day 3 (4h.)

- Smart-agro technologies to an enterprise
- Successful cases of digital transformation around the world

### Day 4 (4h.)

- Visit to a smart-greenhouse and an automated packaging warehouse of Unica Group
- Knowing in detail the successful case of Unica Group

### Day 5 (4h.)

- Road to digital transformation of an agro-enterprise

## DATE AND PLACE OF THE PHYSICAL MOBILITY

From **1 to 5 July 2024**

- Campus of the University of Almería
- Unica Group greenhouse and packaging warehouse (in Almería)

## VIRTUAL COMPONENT (What will the participants do during the virtual component?)

During the virtual period, participants will solve an exercise consists of **assessing the digital maturity of a real agro-company** and writing a report including a set of **initiatives for its digital transformation**.

## VIRTUAL COMPONENT (When will the virtual component happen, and how long will it be?)

After the week in person in Almería, and for a period of 2 weeks, each team will carry out **autonomous work and online meetings** to solve the proposed exercise (with a dedication of 16h).

The third week, during a 4-hour **online session**, each team will present its solution, which will be discussed and evaluated by all course participants.

**ECTS LOAD** (How many ECTS will the participants get)

3 (20 hours in person in Almería and the rest in autonomous work)