

## Digital Transformation in Agriculture: Innovation, Competitiveness and Sustainability

Roquetas de Mar 1 - 3 July

### Format:

On site meetings

### Directors:

Jorge Antonio Sánchez Molina  
Antonio Hernando Vera



This course offers a strategic overview of the digital transformation of intensive agriculture, analysing the entire information cycle, from data capture in the physical environment to its protection against digital threats (video). The programme begins with an exploration of the sector's technological foundations, focusing the discussion on the challenges posed by digitalisation, as well as the importance of telecommunications networks and the use of sensors for precise crop monitoring. The course then delves into the strategic value of data for decision-making, examining how new data spaces and artificial intelligence facilitate smarter, automated management of agricultural systems.

Cutting-edge tools such as digital twins and decision support systems are analysed, enabling the anticipation of behaviours and the assessment of risk scenarios, alongside the integration of robotics to optimise traditionally manual tasks. Finally, the course addresses cybersecurity as a critical and often overlooked pillar in the modernisation of the agricultural sector. It outlines the specific risks arising from the use of connected machinery and cloud-based systems. The programme concludes with a visit to leading technological facilities featuring smart systems in intensive production environments.

## Programme

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1st July

### 09:30: Digital Transformation in Agriculture: Challenges Facing the Agri-Food Sector

#### Participants:

- **Julián Sánchez-Hermosilla López** (Director of CIAMBITAL, University of Almería)
- **Luis Miguel Fernández Sierra** (General Manager, COEXPHAL)
- **Marta Bosquet Aznar** (Chair of IFAPA, the Andalusian Institute for Research and Training in Agriculture, Fisheries, Food and Organic Production, Government of Andalusia)
- **Matías González Martín** (Secretary General for Telecommunications, Digital Infrastructure and Digital Security, Ministry for Digital Transformation and the Civil Service, Government of Spain)
- **Juan Jesús Lara** (Managing Director, San Isidro Agricultural Cooperative (CASI))
- **Roberto García Torrente** (Head of Sustainability, Cajamar)
- **Enrique De Los Ríos Porras** (General Manager, UNICA Group)

11:30: Coffee break

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### 12:00: Sensor Technology in Agriculture: Technologies and Applications

#### Participants:

- **Francisco Gutiérrez Martínez** (Manager, Smart Greenhouse)
- **José Manuel Torres Nieto** (CTO, Hiotera)
- **Joaquín Alejandro Soriano Fernández** (CEO, Ikos Advanced)
- **Salomé García Urbina** (CEO, Niak Labs)

14:00: Lunch break

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## 16:30: Telecommunications and Agriculture: connectivity

### Participants:

- **Eduardo Rodríguez De Miguel** (Head of Digital Services, MasOrange)
- **Alberto Moreno Rebollo** (Head of Regulation, Telefónica Spain)
- **Elena Galindo Ayuso** (Deputy Director-General for Telecommunications Operators and Digital Infrastructure, Ministry for Digital Transformation and the Civil Service, Government of Spain)

## 18:00: Telecommunications and Agriculture: IoT

### Participants:

- **Nerea Míguez Rúa** (Head of Public Sector Solutions Development, Vodafone)
- **Miguel Ángel García Argüelles** (Manager of Special Projects, HISPASAT)
- **Julia Inmaculada Criado Casado** (Deputy Director-General for Planning and Radio Spectrum Management, Ministry for Digital Transformation and the Civil Service, Government of Spain)

## 2<sup>nd</sup> July

## 09:30: Data Spaces for the New Productive Agriculture

### Participants:

- **Antonio Becerra Terón** (Deputy Head of Quality and External Communications at the School of Engineering, University of Almería)
- **Luisa Prieto Domínguez** (Managing Director, Alborada IT)
- **Javier Ponce Martínez** (Director General, Spanish Society for Technological Transformation (SETT))
- **Manuel Torres Gil** (Senior Lecturer, University of Almería)
- **Ana Palacios Morillo** (Director-General for Data, Ministry for Digital Transformation and the Civil Service, Government of Spain)

11:30: Coffee break

## 12:00: AI and Agriculture: from advanced analytics to smart management

### Participants:

- **José Luis Molina Zamora** (CEO, Hispatec)
- **Miguel Hormigo Ruiz** (Head of the Industrial Sector at Secure e-Solutions, GMV)
- **Ángela María Ribeiro Seijas** (Research Scientist at the Centre for Automation and Robotics, Spanish Council of Scientific Research)
- **Andrés Pedreño Muñoz** (Chairman, 1MillionBot SL Group)

14:00: Lunch break

## 16:30: Digital Twins and DSS: key tools for data-driven agriculture

### Participants:

- **Gonzalo Martín Díaz** (CPO, Hispatec Agointeligencia)
- **Manuel Pasamontes Romera** (Consultant, Xperiencia Virtual)
- **Adriana Susana Giret Boggino** (Professor, Polytechnic University of Valencia ESA Digital Twin Earth Project)

## 18:00: Automation and Robotics in the Agricultural Sector: from manual labour to autonomous systems

### Participants:

- **Ángel Cristóbal Lázaro Ríos** (Head of Automation and Robotics for Industry, GMV Innovation Solutions)
- **José Carlos Moreno Úbeda** (Full Professor, University of Almería)
- **Pedro Ruiz García** (President, Grupo La Palma)
- **Rafael Marín Pérez** (Head of the R&D&I Department, Odin Solutions)

## 3<sup>rd</sup> July

### 09:30: Cybersecurity in Agriculture: Safeguarding the farming sector in the digital era

#### Participants:

- **Félix Antonio Barrio Juárez** (Director-General, National Cybersecurity Institute (INCIBE))
- **José Antonio Álvarez Bermejo** (Senior Lecturer, University of Almería)
- **Alberto Estirado Bronchalo** (CEO, TRC)
- **José Iván Jiménez Rodríguez** (IT Manager, Coexphal Group)

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11:30: Coffee break

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### 12:00: UNICA headquarters: high-tech greenhouses

#### Participants:

- **José Antonio López Suárez** (Head of Technology and Systems, Unica Group)
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## Sponsors



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## Contributors

