

Advanced Course
AGRICULTURE 5.0: LEADING THE FUTURE OF AGRICULTURAL PRODUCTIVITY AND SUSTAINABILITY IN THE MEDITERRANEAN, 24-29 November 2025

Hour	Monday 24	Tuesday 25	Wednesday 26	Thursday 27	Friday 28
9:15-10:15	Opening	Efforts to Accelerate Climate Resilience in the Global Drylands with Digital Augmentation A. Govind	Data processing tools: Python, R, AI E. Apolo	Case Study: "Precision agriculture in rainfed area" F.J. García Ramos	Reducing agricultural greenhouse gas emission M. Pérez-Ruiz
10:15-11:15	The Evolution of agriculture: From 1.0 to 5.0 – What lies ahead? M. Pérez-Ruiz	Case Study: "Robotics crop protection." C. Asenjo		Case study: "Smart methodology in citrus crops in the Mediterranean area" S. Montesinos Aranda	The role of policies in driving agriculture 5.0 adoption M.T. Ambrós
11:15-11:45		Coffee break			
11:45-12:45	Agriculture 5.0: challenges and opportunities M. Pérez-Ruiz	Robotics and automation F. Rovira-Mas	Agronomic algorithms: crop protection, yield prediction F. Lacueva	Adaptation of agriculture to different climate change scenarios J. Ribalaygua	Group activity: "drafting a roadmap for agriculture 5.0 in the Mediterranean." S. Montesinos Aranda M. Pérez-Ruiz
12:45-14:00		Lunch			
14:00-15:00	Technology adoption in Mediterranean agriculture (open discussion) M. Pérez-Ruiz	Applied data science in agriculture A. Govind	Agronomic algorithms: crop protection, yield prediction F. Lacueva	Developing climate-resilient cropping systems J. Ribalaygua	Group activity: "drafting a roadmap for agriculture 5.0 in the Mediterranean." S. Montesinos Aranda M. Pérez-Ruiz
15:00-16:00	Precision Agriculture: Tools, Techniques, and Benefits F.J. García Ramos	Blockchain and smart traceability in agriculture 5.0: Coordination and efficiency in agri-Food networks M. Kramer	Practical exercises S. Montesinos Melendo, L. Fernández Fornos and s. Montesinos Aranda		Round table discussion: Promoting innovation in agriculture 5.0 M. Lainez, J. Mesas Carrascosa, S. Montesinos Aranda M. Pérez-Ruiz
16:00-16:15		Coffee break			
16:15-17:15	Spatial Variability: Drones and satellite imagery for crop monitoring S. Montesinos Aranda	Practical exercises S. Montesinos Melendo, L. Fernández Fornos and s. Montesinos Aranda	Practical exercises S. Montesinos Melendo, L. Fernández Fornos and s. Montesinos Aranda		Round table discussion: Promoting innovation in agriculture 5.0 M. Lainez, J. Mesas Carrascosa, S. Montesinos Aranda M. Pérez-Ruiz
17:15-18:15					

Saturday 29: Technical Visit