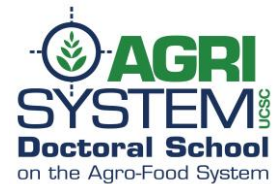




UNIVERSITÀ
CATTOLICA
del Sacro Cuore



DIGITALIZATION, RURAL DEVELOPMENT AND INNOVATION IN AGRICULTURE

Prof. Matteo Gatti

*Faculty of Agriculture, Food and Environmental Sciences, Università Cattolica del Sacro Cuore-
Piacenza*

Course Aims

Students will acquire fundamental knowledge on digitalization of agricultural systems. The course aims at providing information concerning the role of ICTs in rural development as well as in promoting innovation and competitiveness of agriculture. The state of art of digitalization in agriculture will be presented including description of relationships with quality, traceability and sustainability. A particular emphasis will be addressed to precision farming. Case studies will be presented.

Methodology

The course will be developed through lectures and discussions with students. The course will be taught in English.

Course description

1. Introduction to digitalization in agriculture: rural development and agricultural systems (2 hours)
2. Sensing and phenotyping (2 hours)
3. Precision farming. Optimizing the cost-to-benefit ratio by through a smart use of input in agriculture (2 hours)
4. Economic evaluation of precision agriculture. Overview on robotics and automation (2 hour)

Recommended texts

Reading materials will be provided during the class.