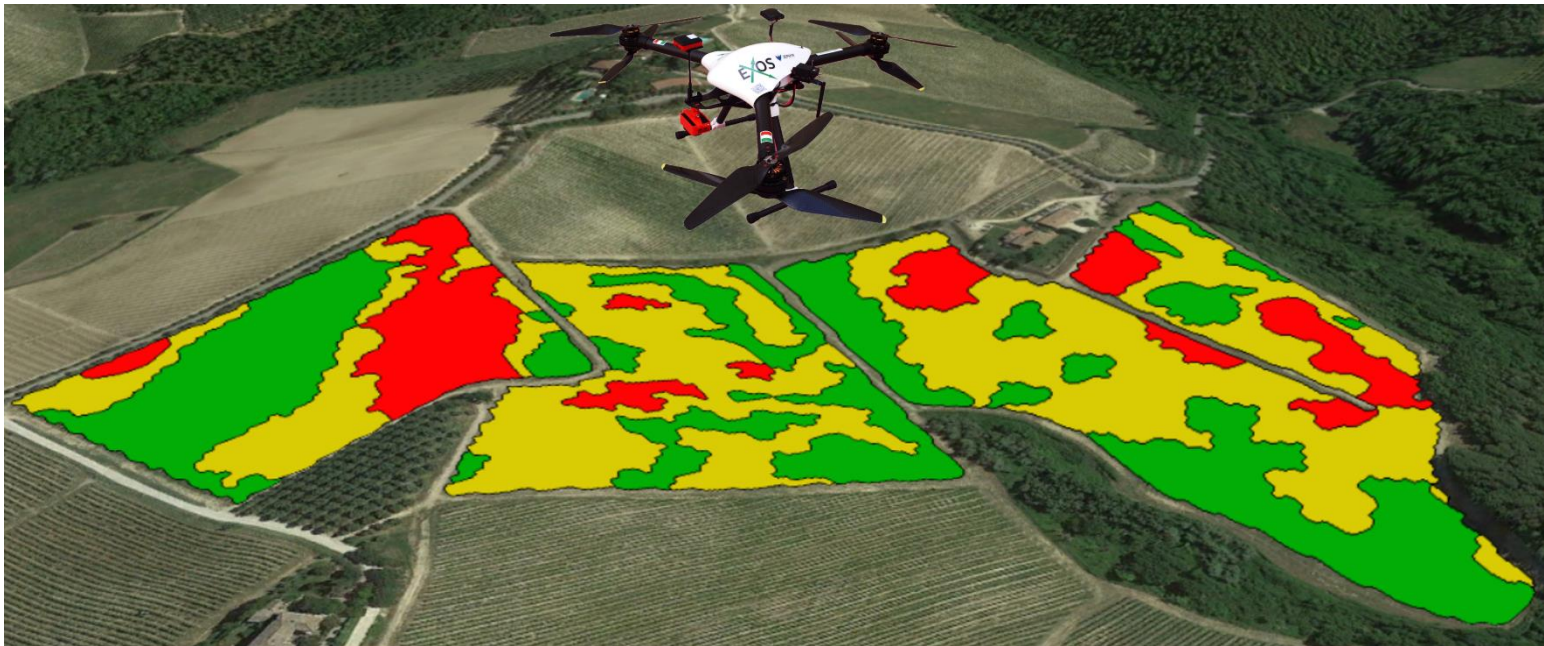




Course in

# Precision Farming and Remote Sensing



## **Contents and Objectives**

The course is intensive and aims to provide the fundamental concepts of precision agriculture techniques through remote sensing technologies with drones, satellites and related data analysis methodologies. The practical and economic aspects will also be addressed as well as the state of the art of the various technologies on the market, focusing in particular on the wine industry. At the end of the course, participants will have all the theoretical and practical information on the tools that can be used in precision agriculture available and ready to use.

## **Who is the course aimed at?**

The course is aimed primarily at professionals interested in supporting and disseminating precision agriculture techniques and methodologies for environmental protection and improvement of agricultural yields to agricultural companies, agricultural consortia and trade associations.

Possible interested parties are agronomists, agricultural experts, agricultural technicians, agricultural technicians, university researchers, surveyors, engineers, drone operators and pilots and anyone else who wants to approach the world of precision agriculture.

## **How the course is conducted**

The course is held individually or in small groups of people, live via webmeeting, showing the technical part and the methodologies of remote sensing, acquisition and post-processing of data, but also the theoretical part and the economic and practical aspects. Real cases of use of technologies in companies with which we collaborate will also be analyzed.

## **Price**

The cost of the course is €390 + VAT per person. For groups of individuals or companies, the price will be adapted to the situation and the number of attendees.

The course can also be combined with the one on Pix4D software and data analysis at a total discounted price of 10%.

## **Certificate of Participation**

At the end of the course a certificate of participation will be issued in PDF format.

## Course Program

- **PRECISION AGRICULTURE (2 hours)**

- Brief history
- State of the art of precision agriculture
- Advantages compared to conventional agriculture
- Spatial and temporal variability
- Environmental, crop and operational monitoring
- Territorial information technologies

- **REMOTE SENSING (4 hours)**

- Drones and satellites for precision agriculture
- Remote sensing images and reflectance
- Spectral characteristics of vegetation and soil
- Vegetation indices
- Remote sensors (RGB, multispectral, thermal, hyperspectral)
- Proximal sensors
- Software (Pix4D and QGis)
- Data acquisition methodologies
- Data pre-processing
- Data calibration
- Data post-processing
- Vigor maps
- Prescription maps
- Real cases and problems

- **PRECISION VITICULTURE (2 hours)**

- The Italian wine market and critical issues
- Principles of precision viticulture
- Economic and management advantages
- Variability in vineyards
- Observation, data collection and their use
- Ground sensors and drones: differences
- Variable rate machines
- Field notebook and data analysis
- Practical examples

- Q/A



+39 3341611876 / +39 3383592353



<https://agrobit.ag/>



<https://bit.ly/agrobitfb>



<https://bit.ly/agrobitsrlig>



<https://bit.ly/agrobitin>



<http://bit.ly/agrobityt>