Application of Precision Agriculture for crops growing

5 ECTS credits

Curricula description

The main aim of this course is to provide to students knowledge about modern methods of crop growth monitoring and the use of this information for crop growing management. Students will learn about the ways of obtaining data from satellites and unmanned aerial vehicles. Obtained data processing and SW will also be discussed.

Course syllabus

1. Introduction to crops growth monitoring

2. Data formats – raster vs. vector, data sources, resolution, data conversion

3. SWs used for data processing

4. Yield maps

5. Satellite data and its application

6. UAV data and its application

7. Spectral properties of the crops and its utilization

8. Crop models, Yield frequency and Application maps

9. Topography attributes and their deriving