

## **PRACTICAL TRAINING (1<sup>st</sup> YEAR, 1<sup>st</sup> Semester)**

**Credit value (ECTS) 4**

### **Course category**

Domain (Imposed)

### **Course holder:**

Lecturer. PhD. Dan CAZACU

### **Discipline objectives (course and practical works)**

- Presentation of constructive and functional variants of equipment used in precision farming;
- Presentation of methods for the acquisition, analysis and interpretation of data available at the terminals of tractors and agricultural machinery with integrated digital technologies;
- Use of different methods and technology specific to smart agriculture;
- Comparison of conventional technology with sustainable agriculture, precision agriculture and smart agriculture.

### **Contents (syllabus)**

<b>Themes and practical works</b>
New machinery for soil tillage.
GPS and GIS in precision agriculture
Agricultural robots
Tools, methods and devices for analysis and monitoring used in precision agriculture
Monitoring and control of tractors and agricultural equipment
The concept of VRT(variable rate of technology) and the agricultural equipment
Integrated technologies for different agricultural equipment

### **Bibliography**

1. Bill A. Stout 1999 - *CIGRE Handbook Volume III*. Publisher American Society of Agricultural Engineers Texas A & M University, USA Co-Editor: Chez Bernard Ministry of Agriculture, Fisheries and Food, France
2. Mircea Badescu, Sorin Boruz, 2005 – *Agricultural and horticultural machines*.Publisher Sitech, Craiova.
3. *Precision farming and variable rate technology A resource guide* -First Edition February, Alberta Council, 2010
4. Cazacu Dan, 2021 - *General notions regarding the digitalization of agriculture*, publisher PIM Iași

### **Minimum performance standards for the assessment of competence**

Develop a team research study highlighting the ability to retrieve and interpret data taken from agricultural aggregates presented during on-farm practice stages: Practice Centre "Zimbru S.A.", Sales-Production Centre "John Deere"- Roman, Sales-Production Centre "Agritehnica"- Iasi.

## Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Oral colloquium	Note from the supervising teacher	60%
Appreciation of the activity during the semester	Evaluation along the way Note from the practice tutor	40%

## Contact

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