

## **AGRICULTURAL MACHINERY (II st Year of study, I st SEMESTER and III rd year of study Ist semester )**

**Credit value** ECTS 4+5

### **Course category**

Domain (Imposed)

### **Course holder:**

Lecturer. Ph.D. Dan Cazacu

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

In the disciplines are presented basic concepts of construction and operation of agricultural equipment, constructive news of tractors and agricultural machinery, technical performance, PTO, hydraulics, suspension mechanism and maintenance as well, etc.

### **Contents (syllabus)**

<b>Course (chapters/subchapters)</b>
Tools, machinery, agricultural aggregates - the working capacity
Agricultural equipment for soil processing
Fertilization agricultural equipment
Agricultural machinery for seeding and planting
Farm machinery for phytosanitary treatments
Harvesting equipment for agriculture
Machines and equipment for conditioning agricultural products
Equipment used in precision farming

<b>Practical works</b>
Plows, harrows, cultivators, combiners
Mills machines, holes digging, sub soiling processing machines
Seeders, planters
Fertilization equipment
Sprayers
Harvester for cereals and technical plants
Machinery for treaty and conditioning seeds

### **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. Cazacu Dan and collaborators, 2017 - *The tractor for everyone to understand*. PIM- Publishing House, Iași
3. Cazacu Dan, Rosca R., 2015 - *Construction of tractors* ", 1st edition Ion Ionescu- Publishing House from Brad, Iași
4. Mircea Badescu, Sorin Boruz, 2005 – *Agricultural and horticultural machines*.-Publisher Sitech,

Craiova.

5. Toma Dragos, Traian Neagu and collab., 1981 - *Tractors and machinery for agriculture*, vol. II, Didactic and Pedagogical Bucharest- Publishing House-.

### **Evaluation**

<b>Evaluation form</b>	<b>Evaluation Methods</b>	<b>Percentage of the final grade</b>
Exam	oral	60%
Laboratory activity	tests, laboratory activity	40%

### **Contact**

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