

Elements of mechanical and Technological dimensioning (IV Year of study, VII SEMESTER)

Credit value (ECTS) 3

Course category

Free elective course

Course holder:

Lecturer Dr. Constantin CHIRILĂ

Discipline objectives (course and practical works)

The course aims to make students acquire basic knowledge of related mechanical and technological sizing of the machinery in the food industry

Practical work aims to make students acquire skills training regarding technological calculation and calculation of mechanical machinery from the food industry.

Contents (syllabus)

Course (chapters/subchapters)
Mechanical characteristics of metallic materials
General elements of the design calculation of parts of machines
Types of mechanical strain to which are subjected pieces of machinery in the food industry
Calculation of the non-removable joinings and demountable
The calculation of types of machine parts to rotation
The calculation of machine parts for transmission of rotary motion
Calculation of some types of conveyors
Elaboration of materials balance, energy, heat balance

Practical works
Work safety rules;
Recap of notions of mathematical with application in technical
Recap of notions of strength of materials
Applications on the calculation of non-removable joinings
Applications on the calculation of demountable joinings
Applications regarding the calculation certain machine parts of rotation
Applications regarding materials balance
Knowledge assessment

Bibliography

1. Chirilă C., – Elemente de dimensionare mecanică și tehnologică – Note de curs.;
2. Drăghici I și col., – Îndrumar de proiectare în construcția de mașini – vol I -Editura Tehnică, București, 1981;
3. Drăghici I și col., – Îndrumar de proiectare în construcția de mașini – vol II -Editura Tehnică, București, 1982.
4. Mioara Hapenciuc - Echipamente de transport în industria alimentară - Editura Fundației Universitare “Dunărea de jos” Galați, 2004

5. Rădulescu Gh. și col.,– Îndrumar de proiectare în construcția de mașini – vol III -Editura Tehnică, București, 1986.
6. Țenu I – Tehnologii, procedee, mașini și instalații pentru industria produselor vegetale – Editura Bolta Rece, Iași, 1997

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	written assessment	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	40%

Contact

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