Tárgytematika / Course Description
Technologies and machines in plant based food production

N_DMA41

Tárgyfelelős neve / Teacher's name: Dr. Kovács Attila József
Félév / Semester: 2023/24/1
Beszámolási forma / Assesment: Vizsga
Tárgy heti óraszáma / Teaching hours(week): 0/0/0
Tárgy féléves óraszáma / Teaching hours(sem.): 30/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The purpose of the course is to describe the complex production technology of plant based food processing, focusing mainly on the trends of new development directions. During the course the production engineering tasks of machinery and equipment, the food processing operations and technological aspects, and the state-of-the art construction solutions of equipment are discussed. The introduction of food technologies are based on the applied machines and equipment. By completing the course students will gain the foundation for development and they will be able to follow and adapt with the developments of food industrial technologies. The course creates the foundation for their development. The students' stand-alone work and organized visits allow them to gain practical experience.

TANTÁRGY TARTALMA / DESCRIPTION

1. Machines and technologies in the milling industry.
2. Machines and technologies in the baking industry.
3. Machines and technologies in the confectionary industry.
4. Machines and technologies in the canning industry.
5. Machines and technologies in the refrigeration industry.
6. Machines and technologies in the winemaking industry.

7. Machines and technologies in the brewing industry.

8. Machines and technologies in the distilling industry.

9. Machines and technologies in the vegetable oil industry.

10. Machines and technologies in the sugar industry.

11. Machines and technologies in the beverage industry.12. Machines and technologies for storage.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Meeting the conditions set by the supervisor.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Fábry Gy. (Eds.) (1995): Élelmiszer-ipari eljárások és berendezések. Mezőgazda Kiadó.

Barta J. (2007): A gyümölcsfeldolgozás technológiái. Mezőgazda Kiadó

Biacs P., Szabó G., Szendrő P., Véha A. (2010): Élelmiszer-technológia mérnököknek. Szegedi

Tudományegyetem

Albert Ibarz, G.V. Barbosa Cánovas (2003): Unit operation in food engineering. CRC Press

Geroge D. Saracovas, Zacharias B. Maroulis (2011): Food process engineering operations. CRC Press

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL