

Tárgytematika / Course Description Production Logistics 2.

AJNB_LSTA019

Tárgyfelelős neve /

Teacher's name: dr. Hartványi Tamás

Félév / Semester: 2023/24/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 2/0/0

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The students will receive a broad introduction to deeper levels of production logistics. They will get familiar with the principals of lean theory, different material flow mechanisms, ID systems, quality requirements. The lecturers will demonstrate best practice waste management solutions, automation projects and elements of Industry 4.0.

The lectures will give practical and theoretical knowledge and will contain case studies and academic reviews.

TANTÁRGY TARTALMA / DESCRIPTION

1. The Toyota Production System, Principles of Lean
2. Lean methodology I
3. Lean methodology II
4. Value Stream Mapping
5. Material flow control, push and pull, MRP and kanban, hybrid operations, quee
6. Identification systems, traceability, FIFO, Quality Control in production systems, document management, Production and quality standards in different industries
7. National holiday – 23rd October
8. Applications for production support - Production planning – case study
9. Production and capacity planning – case study
10. Industry 4.0 and MES systems, Automation in production plants -TB
11. Project management, RACI matrix – TB
12. Resource allocation, task assignment problem – TB
13. Heuristic algorithms for solving production problems - TB
14. Preliminary exam

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

The assessment is based on the written exam at the end of the semester. The students can also take a preliminary exam in the final week of the semester. The exam dates will be published in Neptun, the following grading scale applies:

Assessment result **Grade**

0% - 50%	1
51% - 62%	2
63% - 74%	3
75% - 87%	4
88% - 100%	5

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

S. Anil Kumar, N. Suresh: Production and operations management, New Age International Publishers, 2nd edition, 2008

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL

Jeffrey K. Liker: The Toyota Way, McGraw-Hill Education-Europe, 2005