



1. Subject name	Planning of warehousing systems				
2. Subject name in Hungarian	Raktározási rendszerek tervezése				
3. Code	BMEKOALM323	4. Evaluation type	exam grade	5. Credits	5
6. Weekly contact hours	2 (10) Lecture	2 (11) Practice	0 (0) Lab		
7. Curriculum	Logistics Engineering MSc (L)	8. Role	Mandatory (mc) at Logistics Engineering MSc (L)		
9. Working hours for fulfilling the requirements of the subject					150
Contact hours	56	Preparation for seminars	12	Homework	40
Reading written materials	16	Midterm preparation	6	Exam preparation	20
10. Department	Department of Material Handling and Logistics Systems				
11. Responsible lecturer	Dr. Bóna Krisztián				
12. Lecturers	Dr. Bóna Krisztián, Sztrapkovichs Balázs, Puskás Eszter				
13. Prerequisites	strong: KOALM331 - Process planning strong: KOALM336 - Logistics planning softwares week: KOALM335 - Simulations planning				
14. Description of lectures					
<p>The main material flows and processes in a warehouse. Specific logistics system planning methodology of warehousing systems. The typical logistics technology variations of storing. Planning of transporting connections and loading technology. Planning the dimensions of loading bays, and the goods preparation areas of warehouses. The order picking methods and systems. The technology of order picking. Planning of the order picking process. Planning the topology and layout of storage systems in case of a traditional warehousing system. Planning the topology and layout of storage systems in case of a very-narrow-aisle (VNA) system. The sizing tasks regarding to the applied storage equipments. How to create a logistics system plan of a warehousing technology.</p>					
15. Description of practices					
Description of the practical task of planning a manual, material handling machine supported and a high bay warehousing system including the operational areas.					
16. Description of laboratory practices					
17. Learning outcomes					
A. Knowledge					
<ul style="list-style-type: none"> • Knowledge of the loading processes, and specific form of the transportation connections. • Knowledge of the goods preparation processes and technologies. • Knowledge of the storage technologies. • Knowledge of the packet goods based warehousing systems. • Knowledge of the system sizing methodologies. • Knowledge of order picking methods, aspects of choosing optimal order picking method. 					
B. Skills					
<ul style="list-style-type: none"> • Can design warehousing systems application by the above mentioned knowledge and the additional professional knowledge. 					
C. Attitudes					
<ul style="list-style-type: none"> • Strive to maximize their abilities to make their studies at the highest possible level, with a profound and independent knowledge, accurate and error-free, in compliance with the rules of the applicable tools, in collaboration with the instructors. 					
D. Autonomy and Responsibility					
<ul style="list-style-type: none"> • Takes responsibility for the quality of the work and the ethical standards that set an example for the classmates, using the knowledge acquired during the course. 					
18. Requirements, way to determine a grade (obtain a signature)					

The requirement of the signature is to fulfill the homework and one midterm [test](#). The homework (30%), the [test](#) (20%) and the exam result (50%) are included in the final grade.

19. Opportunity for repeat/retake and delayed completion

The midterm [test](#), the part-performance check and the final submission can both be resubmitted once.

20. Learning materials

Students can download the subject notes in pdf format via Moodle.

Effective date	10 October 2019	This Subject Datasheet is valid for	Inactive courses
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