



1. Subject name	Integrated material flow systems				
2. Subject name in Hungarian	Integrált anyagmozgató rendszerek				
3. Code	BMEKOALM332	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	2 (9) Lecture	1 (5) Practice	0 (0) Lab		
7. Curriculum	Logistics Engineering MSc (L)	8. Role	Specialization (sp) at Logistics Engineering MSc (L)		
9. Working hours for fulfilling the requirements of the subject					120
Contact hours	42	Preparation for seminars	8	Homework	19
Reading written materials	36	Midterm preparation	0	Exam preparation	15
10. Department	Department of Material Handling and Logistics Systems				
11. Responsible lecturer	Dr. Bohács Gábor				
12. Lecturers	Gáspár Dániel, Szabó Péter, Odonics Boglárka				
13. Prerequisites					
14. Description of lectures					
Basics of production automation. Basics and typical equipment of material handling. An overview of typical production system structures, a description of the construction of equipment relevant for material handling. Formulation of integrated material handling functions. Automation of integrated material handling systems. Application of robots for material handling tasks. Special grippers and sensors. In addition to the lectures, an excursion to relevant company will be organized.					
15. Description of practices					
During the practices examples related to the learnt machines and systems are presented and discussed.					
16. Description of laboratory practices					
17. Learning outcomes					
A. Knowledge <ul style="list-style-type: none">Knowledge of special integrated material handling systems.2 Knowledge of the applicability of material handling components. B. Skills <ul style="list-style-type: none">He is able to assess solutions to a certain problem.Capable of creating optimal structures from the assessed components. 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">Take 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)					
Requirements of signature: 1 homework (25% for the part-performance check, 25% for the final submission). Exam (50%)					
19. Opportunity for repeat/retake and delayed completion					
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	