

Faculty of Transportation Engineering and Vehicle Enginee

^{1. Subject name} Simulation systems and software in logistcs

2. Subject name in Hungarian	Szimulációs rendszerek és szoftverek logisztikai alkalmazása				
3. Code	BMEKOEAD011	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	4 (0) Lecture	0 (0) Practice	0 (0) Lab		
7. Curriculum	PhD Programme	8. Role	Basic course		
9. Working hours for fulfilling the requirements of the subject 76					
Contact hours	56	Preparation for seminars	4	Homework	8
Reading written materials	4	Midterm preparation	4	Exam preparation	0
10. Department	Department of Material Handling and Logistics Systems				
11. Responsible lecturer	Dr. Bohács Gábor				
12. Lecturers	Dr. Bohács Gábor				
13. Prerequisites					

14. Description of lectures

SD simulations, DES simulations, agent-based simulations. Overview of features of modern simulation software. Typical applications for simulation systems in industry and for scientific tasks, in particular optimization of material flow systems. Presentation of the operation of modern simulation software. Trends in the development of simulation systems.

15. Description of practices

16. Description of labortory practices

17. Learning outcomes

A. Knowledge

- Knowledge of Logistics Simulation Software.
- Solving Logistics Problems with Simulation.
- Knowledge of development trends of logistics simulations.
- B. Skills
 - It is able to combine logistics problems with the right model.
 - Ability to develop a logistics simulation model.
- C. Attitudes
 - 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
 - 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)

The grade is calculated from the grade of the individual work and the tests as an average.

19. Opportunity for repeat/retake and delayed completion

Announced at the beginning of the semester

20. Learning materials

Law, Kelton: Simulation Modeling and Analysis

Effective date 27 November 2019 This Subject Datasheet is valid for Inactive courses