



<b>1. Subject name</b>	<b>Simulation systems and software in logistics</b>				
<b>2. Subject name in Hungarian</b>	Szimulációs rendszerek és szoftverek logisztikai alkalmazása				
<b>3. Code</b>	<b>BMEKOEAD011</b>	<b>4. Evaluation type</b>	<b>exam grade</b>	<b>5. Credits</b>	<b>4</b>
<b>6. Weekly contact hours</b>	<b>4 (0) Lecture</b>	<b>0 (0) Practice</b>	<b>0 (0) Lab</b>		
<b>7. Curriculum</b>	<b>PhD Programme</b>	<b>8. Role</b>	<b>Basic course</b>		
<b>9. Working hours for fulfilling the requirements of the subject</b>					<b>76</b>
<b>Contact hours</b>	56	<b>Preparation for seminars</b>	4	<b>Homework</b>	8
<b>Reading written materials</b>	4	<b>Midterm preparation</b>	4	<b>Exam preparation</b>	0
<b>10. Department</b>	<b>Department of Material Handling and Logistics Systems</b>				
<b>11. Responsible lecturer</b>	Dr. Bohács Gábor				
<b>12. Lecturers</b>	Dr. Bohács Gábor				
<b>13. Prerequisites</b>					
<b>14. Description of lectures</b>	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.				
<b>15. Description of practices</b>					
<b>16. Description of laboratory practices</b>					
<b>17. Learning outcomes</b>	<p>A. Knowledge</p> <ul style="list-style-type: none"> <li>• Knowledge of Logistics Simulation Software.</li> <li>• Solving Logistics Problems with Simulation.</li> <li>• Knowledge of development trends of logistics simulations.</li> </ul> <p>B. Skills</p> <ul style="list-style-type: none"> <li>• It is able to combine logistics problems with the right model.</li> <li>• Ability to develop a logistics simulation model.</li> </ul> <p>C. Attitudes</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>D. Autonomy and Responsibility</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>				
<b>18. Requirements, way to determine a grade (obtain a signature)</b>	The grade is calculated from the grade of the individual work and the tests as an average.				
<b>19. Opportunity for repeat/retake and delayed completion</b>	Announced at the beginning of the semester				
<b>20. Learning materials</b>	Law, Kelton: Simulation Modeling and Analysis				
<b>Effective date</b>	27 November 2019	<b>This Subject Datasheet is valid for</b>	2023/2024 semester II		