



1. Subject name	Advanced Driver Assistance Systems				
2. Subject name in Hungarian	Vezetéstámogató rendszerek				
3. Code	BMEKOGGM657	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	2 (10) Lecture	0 (0) Practice	2 (11) Lab		
7. Curriculum	Vehicle Engineering MSc (J)	8. Role	Specialization (sp) at Vehicle Engineering MSc (J)		
9. Working hours for fulfilling the requirements of the subject					120
Contact hours	56	Preparation for seminars	18	Homework	28
Reading written materials	8	Midterm preparation	0	Exam preparation	10
10. Department	Department of Automotive Technologies				
11. Responsible lecturer	Dr. Tihanyi Viktor				
12. Lecturers	Dr. Tihanyi Viktor, Dr. Szalay Zsolt, Dr. Török Árpád				
13. Prerequisites					
14. Description of lectures					
The target is to present driver assistant systems and automated driving functions. The levels of automation according to SAE. Brief overview about vehicle dynamics. Driver assistance system overview on the stabilization level. Typical DAS systems, like AEBS, LDW, LKA available at present vehicles. Outlook on future advanced driver assistance systems at higher automation levels.					
15. Description of practices					
16. Description of laboratory practices					
The task is to work out an ADAS related topic including realization, testing and documentation.					
17. Learning outcomes					
A. Knowledge <ul style="list-style-type: none">• Knowledge of ADAS systems B. Skills <ul style="list-style-type: none">• Ability to develop ADAS systems C. Attitudes <ul style="list-style-type: none">• Openness to new opportunities in the field D. Autonomy and Responsibility <ul style="list-style-type: none">• Participate in solving independent task					
18. Requirements, way to determine a grade (obtain a signature)					
An individual task fulfillment is required for the signature. The final mark will be provided taking the exam result and the individual task result into account with weighted average of 60-40%.					
19. Opportunity for repeat/retake and delayed completion					
Individual tasks replacement one					
20. Learning materials					
Slides					
Effective date	10 October 2019	This Subject Datasheet is valid for		Inactive courses	