



1. Subject name	Information connection of the vehicle and the track				
2. Subject name in Hungarian	Jármű-pálya információs kapcsolata				
3. Code	BMEKOKAM232	4. Evaluation type	mid-term grade	5. Credits	3
6. Weekly contact hours	2 (7) Lecture	0 (0) Practice	0 (0) Lab		
7. Curriculum	Transportation Engineering MSc (K)	8. Role	Specialization (sp) at Transportation Engineering MSc (K)		
9. Working hours for fulfilling the requirements of the subject					90
Contact hours	28	Preparation for seminars	4	Homework	24
Reading written materials	22	Midterm preparation	12	Exam preparation	0
10. Department	Department of Control for Transportation and Vehicle Systems				
11. Responsible lecturer	Dr. Szabó Géza				
12. Lecturers	Dr. Szabó Géza				
13. Prerequisites					
14. Description of lectures					
The course provides an overview of the procedures and methods of information transfer between the vehicle and the track in different transport sectors. In addition, it presents technologies and traffic management methods developed based on information transfer. The course focuses on the needs assessment, specification and selection of appropriate technology for communications in transport systems. Topics: Specifics of communications; general communication techniques. Wired and broadcast transmissions; characteristics of broadcast transmissions. Steps to specify communication needs; the conditions for fulfilling the specification; choice of available technologies for communication.					
15. Description of practices					
16. Description of labortory practices					
17. Learning outcomes					
A. Knowledge <ul style="list-style-type: none">understand and can apply communication techniques; has knowledge of communication theory related to transport and vehicle engineering. B. Skills <ul style="list-style-type: none">able to analyze or specify communication sub-systems in the field of transport and vehicle. C. Attitudes <ul style="list-style-type: none">to participate in solving communication problems in the field of transport or vehicle, to work efficiently and willingly with specialists of other fields (in particular: electrical engineering). D. Autonomy and Responsibility <ul style="list-style-type: none">he/she is aware of and treats the responsibility associated with the task solution during transport system communication analysis and specification.					
18. Requirements, way to determine a grade (obtain a signature)					
Two midterm tests and a small project task. The final result based on the average of the tests. For the final mark the small project task shall be accepted.					
19. Opportunity for repeat/retake and delayed completion					
One test can be retried and the small project task can be delayed submitted at the end of the semester					
20. Learning materials					

