Transport informatics

1. Subject name	Transport informatics				
2. Subject name in Hungarian	Közlekedési informatika				
3. Code	BMEKOKKM223	4. Evaluation type	exam grade	5. Credits	5
6. Weekly contact hours	2 (10) Lecture	0 (0) Practice	2 (11) Lab		
7. Curriculum	Transportation Engineering MSc (K)	8. Role	Mandatory (mc) at Transportation Engineering MSc (K)		
9. Working hours for fulfilling the requirements of the subject					150
Contact hours	56	Preparation for seminars	15	Homework	34
Reading written materials	20	Midterm preparation	15	Exam preparation	10
10. Department	Department of Transport Technology and Economics				
11. Responsible lecturer	Dr. Csiszár Csaba				
12. Lecturers	Csonka Bálint, Földes Dávid				
13. Prerequisites					

14. Description of lectures

Modeling basic processes and information systems of the transportation operations. Structural and functional models. Informatics structure of transportation organizations. Summarization of conditions and opportunities of integration. Introduction and classification of analysis and modelling methods. Electromobility. Mobility services based on autonomous vehicles.

15. Description of practices

16. Description of labortory practices

System planning rudiments. Case studies. The students elaborate a complex topic regarding modelling and planning of an information system for transport operation.

17. Learning outcomes

A. Knowledge
- The students know structure and operation of complex transportation information systems.

B. Skills
- They are able to analyse and design transportation information systems and operational processes.

C. Attitudes
- The students strive for precise and errorless task accomplishment.

D. Autonomy and Responsibility
- They apply the knowledge with responsibility; they are able to work independently or in a team according to the situation.

18. Requirements, way to determine a grade (obtain a signature)

The students write 2 midterms and submit 1 student assignment. The mid-semester signature is obtained if all the midterms are passed (half of the maximal scores) and the student assignment is submitted and accepted (at least half of the maximal scores). The semester is finished by oral exam. The final mark contains the mid-semester performance in 30%.

19. Opportunity for repeat/retake and delayed completion

The midterms can be retaken according to Code of Studies. The student assignment can be submitted after deadline (if extra fee is paid).

20. Learning materials

ppt slides

Csaba Csiszár – Bálint Csonka – Dávid Földes: Innovative Passenger Transportation Systems (book)
Dr. Csiszár Csaba – Caesar Bálint – Csonka Bálint – Földes Dávid: Transportation Information Systems I. Study-aid for

practices in computer laboratory (2016)

Effective date	10 October 2019	**This Subject Datasheet is valid for**	Inactive courses