Budapest University of Technology and Economics
Faculty of Transportation Engineering and Vehicle Enginee

1. Subject name	**Traffic flow**				
2. Subject name in Hungarian	Közlekedési áramlatok				
3. Code	**BMEKOKUM204**	**4. Evaluation type**	**mid-term grade**	**5. Credits**	**4**
6. Weekly contact hours	**2 (9) Lecture**	**1 (5) Practice**	**0 (0) 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					**120**
Contact hours	42	**Preparation for seminars**	12	**Homework**	27
Reading written materials	25	**Midterm preparation**	14	**Exam preparation**	0
10. Department	**Department of Transport Technology and Economics**				
11. Responsible lecturer	Kózel Miklós				
12. Lecturers	Kózel Miklós, Soltész Tamás				
13. Prerequisites					

14. Description of lectures

Stochastic parameters of road traffic flow and its relations. Characteristics and states of road traffic. Characteristics of intersections, signalized networks and their evaulation. Evaulation of travel chains in urban transport. Correlation between public transport flow parameters. Characteristics of pedestiran flows, measurement techniques. Description of general queuing procedures.

15. Description of practices

Indroducing measurements and data analysis methods according to individual and group excercises.

16. Description of labortory practices

17. Learning outcomes

A. Knowledge
- Knows the characteristics, states and relations of pedestrian, road and public transport flows. Knows the coordination methods and evaluation of traffic flows in signalized intersections. Knows methods for the evaluation of travel chains in urban transport. Knows the basics of queueing theory.

B. Skills
- Able to apply and elaborate methods for the qualification of traffic flow through various transport modes. Able to elaborate traffic survey methods to describe pedestrian, road and public transport flows. Able to evaluate procedures, describe them numerically and design service facilities with the aim of queueing theory.

C. Attitudes
- Applies the indices and qualification systems for the evaluation of transport systems which describe traffic flow progress the best. Aims to apply/elaborate methods for the qualification of transport systems which describe the examined system well, required data can be understood easily and recorded with slight resources.

D. Autonomy and Responsibility
- Able to elaborate technical problems on high standards alone or as a member of a group, as well. Feels responsibility for the result and standard of their work; aims to describe reality as close and accurate as possible when describing transport systems.

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

2 midterms, 4 individual or group excercises.

19. Opportunity for repeat/retake and delayed completion

2 retake opportunites; one midterm twice or both midterms once. One upgrade possibility for each excercise until a new deadline.

20. Learning materials

Slides and collection of formulas in electronic form, videos, publications			
Effective date	10 October 2019	**This Subject Datasheet is valid for**	2023/2024 semester II