

**Faculty of Transportation Engineering and Vehicle Enginee** 

# Statistics in Transport (PhD)

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2. Subject name in Hungarian	Közlekedésstatisztika (PhD)				
3. Code	BMEKOKKD013	4. Evaluation type	exam grade	5. Credits	3
6. Weekly contact hours	2 (0) Lecture	0 (0) Practice	0 (0) Lab		
7. Curriculum	PhD Programme	8. Role	Specific course		
9. Working hours for fulfilling the requirements of the subject					102
Contact hours	70	Preparation for seminars	5	Homework	6
Reading written materials	8	Midterm preparation	5	Exam preparation	8
10. Department	Department of Transport Technology and Economics				
11. Responsible lecturer	Dr. Török Ádám				
12. Lecturers	Dr. Sipos Tibor, Dr. Török Ádám				
13. Prerequisites					

## 14. Description of lectures

Transport is an integral part of advanced societies. He is responsible for passenger transport, including access to services and goods and leisure mobility. He is also responsible for transporting consumer goods. Regional, national and global economies rely on efficient and safe transport. The aim of the course is the statistical analysis of data generated during transport processes. Descriptive statistics. Class interval estimation, hypothesis test, sample comparison. Linear regression. <u>Time series analysis</u>. Principal Component Analysis. Spatial Statistics.

**15. Description of practices** 

## 16. Description of labortory practices

### **17. Learning outcomes**

A. Knowledge B. Skills

- The student repeats the material of the descriptive statistics and the hypothesis test.
- It learns the evolution of predictions, and thus opens up its thinking to accommodate novel solutions.
- The student will be able to specialize the general statistical problems in time and space.

C. Attitudes D. Autonomy and Responsibility

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

It is required to fulfill in time the individual student work.

19. Opportunity for repeat/retake and delayed completion

The attendance requirements cannot be delayed completed. The individual case study report can be delayed submitted in the delayed completion period.

### **20. Learning materials**

Simon P Washington; Methew G Karlaftis; Fred L. Mannering: Statsictical and Econometric Methods for Transportation Data Analysis, Taylor a& Francis; 2011

Effective date 27 November 2019 This Subject Datasheet is valid for 2024/2025 semester II