

# **Budapest University of Technology and Economics**

# **Faculty of Transportation Engineering and Vehicle Enginee**

1. Subject name	Controlle	d vehicle	system	dynamics	II. PhD	
2. Subject name in Hungarian	Szabályozott járműdinamikai rendszerek II. (PhD)					
3. Code	BMEKOGJD001	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		
9. Working hours for fulfilling the requirements of the subject 120						
<b>Contact hours</b>	28	Preparation for seminars	14	Homework	22	
Reading written materials	26	Midterm preparation	30	Exam preparation	0	
10. Department	Department of Automotive Technologies					
11. Responsible lecturer	Dr. Szalay Zsolt					
12. Lecturers	Dr. Szalay Zsolt					
13. Prerequisites	strong: BMEKOGJD010 - Controlled vehicle system dynamics I. PhD					
14. Description of	lectures					

Our students can effectively use the knowledge of this subjects during their research on modern, electronically controlled

15. Description of practices

vehicle dynamics systems.

#### 16. Description of labortory practices

#### 17. Learning outcomes

### A. Knowledge

• Familiar with vehicle dynamics fundamentals.

#### B. Skills

• Ability to research and develop specific processes.

#### C. Attitudes

- Openness to new opportunities in the field.
- D. Autonomy and Responsibility
  - Participate in independent research task.

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

The acquisition of the signature of the subject, and, in addition, the condition of taking exam is giving in the complete individual student homework for deadline. The exam is oral.

## 19. Opportunity for repeat/retake and delayed completion

There is one occasion to retake the exam.

#### 20. Learning materials

- 1. Hans Pacejka: Tire and Vehicle Dynamics, Elsevier B-ELS-049, ISBN of 9780080970172, 2012.
- 2. Tire and Wheel Technology, 2011, SAE International SP-2296, ISBN of 978-0-7680-4735-6, 2011.
- 3. Vehicle Dynamics Stability and Control, 2011, SAE International SP-2297, ISBN of 978-0-7680-4736-3, 2011.
- 4. Rao V. Dukkipati, Jian Pang, Mohamad S. Qatu, Gang Sheng, Zuo Shuguang, Road Vehicle Dynamics, SAE International, R-366, ISBN of 978-0-7680-1643-7, 2008.

Effective date	27 November 2019	This Subject Datasheet is valid for	Inactive courses
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