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| 1. Subject name | Electronically controlled vehicle systems PhD | | | | |
| 2. Subject name in Hungarian | Elektronikusan szabályozott járműrendszerek PhD | | | | |
| 3. Code | BMEKOGJD003 | 4. Evaluation type | exam grade | 5. Credits | 4 |
| 6. Weekly contact hours | 4 (0) Lecture | 0 (0) Practice | 0 (0) Lab | | |
| 7. Curriculum | PhD Programme | 8. Role | Basic course | | |
| 9. Working hours for fulfilling the requirements of the subject | | | | | 120 |
| Contact hours | 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. Tihanyi Viktor | | | | |
| 12. Lecturers | Dr. Tihanyi Viktor | | | | |
| 13. Prerequisites | | | | | |
| 14. Description of lectures | | | | | |
| Our students can effectively use the knowledge of this subjects during their research on modern, electronically controlled vehicle dynamics systems. Topics: design problem of electronically controlled vehicle dynamics systems used in modern vehicles; different types of suspension control systems; electronically controlled levelling systems of commercial vehicles; electronically controlled steering, braking and driving systems; stability control system. | | | | | |
| 15. Description of practices | | | | | |
| 16. Description of laboratory practices | | | | | |
| 17. Learning outcomes | | | | | |
| A. Knowledge <ul style="list-style-type: none"> Familiar with vehicle dynamics fundamentals. B. Skills <ul style="list-style-type: none"> Ability to research and develop specific processes. C. Attitudes <ul style="list-style-type: none"> Openness to new opportunities in the field. D. Autonomy and Responsibility <ul style="list-style-type: none"> 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 | |