



1. Subject name	Transmission system design				
2. Subject name in Hungarian	Erőátvitel tervezése				
3. Code	BMEKOGJM612	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	2 (10) Lecture	0 (0) Practice	2 (11) Lab		
7. Curriculum	Vehicle Engineering MSc (J)	8. Role	Specialization (sp) at Vehicle Engineering MSc (J)		
9. Working hours for fulfilling the requirements of the subject					120
Contact hours	56	Preparation for seminars	18	Homework	0
Reading written materials	26	Midterm preparation	10	Exam preparation	10
10. Department	Department of Automotive Technologies				
11. Responsible lecturer	Dr. Zöldy Máté				
12. Lecturers	Vass Sándor				
13. Prerequisites					
14. Description of lectures					
Design of a selected power transmission unit (camshaft, gearbox or driven bridge) for an internal combustion engine, hybrid drive chain, or electric vehicle. Determination of main dimensions based on vehicle dynamics calculations, geometric dimensioning of individual components, gears, shafts, bearing strength and lifetime of bearings, design and dimensioning of actuating mechanisms, design of enclosure housings, mounting elements.					
15. Description of practices					
16. Description of laboratory practices					
Semester planning task design on computer, consultation.					
17. Learning outcomes					
A. Knowledge <ul style="list-style-type: none">• Knowledge of power units. B. Skills <ul style="list-style-type: none">• Ability to develop power units. 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 solving independent task.					
18. Requirements, way to determine a grade (obtain a signature)					
During the semester 1 midterm test has to be completed with more the 50 % of the maximal points. The conditions for obtaining the signature are the completing the midterm test. Final grade equals to the result of the written exam.					
19. Opportunity for repeat/retake and delayed completion					
The midterm test can be retaken once.					
20. Learning materials					
Slides and presentation notes					
Effective date	10 October 2019	This Subject Datasheet is valid for		Inactive courses	