



1. Subject name	Fixing and sealing				
2. Subject name in Hungarian	Kötés és tömítéstechnológia				
3. Code	BMEKOGGM650	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	14	Homework	12
Reading written materials	24	Midterm preparation	4	Exam preparation	10
10. Department	Department of Automotive Technologies				
11. Responsible lecturer	Dr. Bán Krisztián				
12. Lecturers	Dr. Markovits Tamás, dr. Göndöcs Balázs				
13. Prerequisites					
14. Description of lectures					
Advanced joining technologies used in vehicle productions. Laser joining and other processes. Methods and tools for testing the defects of the joints. Materials, constructions and assembly technologies of the applied static and dynamic seals in vehicle components. Methods and tools of tightness test and troubleshooting.					
15. Description of practices					
16. Description of laboratory practices					
Realisation and test of the joining techniques. Implementating sealing solutions and performing sealing test. Development of adhesive technology in independent student task.					
17. Learning outcomes					
A. Knowledge <ul style="list-style-type: none"><li>• Understanding the presented sealing and joining processes.</li></ul> B. Skills <ul style="list-style-type: none"><li>• Ability to develop the technologies.</li></ul> C. Attitudes <ul style="list-style-type: none"><li>• Openness to the new possibilities of the field.</li></ul> D. Autonomy and Responsibility <ul style="list-style-type: none"><li>• Participate in individual problem solving.</li></ul>					
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. In the semester participation in labs is mandatory and the planning task is required to be delivered to an acceptable level. The condition of the signature is the correspondingly qualified midterm exam, fulfilment of all lab activities and task submission. The result of the exam give the basis for the final grade.					
19. Opportunity for repeat/retake and delayed completion					
The midterm test can be retaken once. The planning task can be delivered once additionally. One lab can be done once additionally.					
20. Learning materials					
Slides and presentation notes					
Effective date	10 October 2019	This Subject Datasheet is valid for		Inactive courses	