



1. Subject name	Vehicle superstructure design				
2. Subject name in Hungarian	Járműfelépítmény tervezés				
3. Code	BMEKOJSM667	4. Evaluation type	mid-term grade	5. Credits	5
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					150
Contact hours	56	Preparation for seminars	18	Homework	50
Reading written materials	12	Midterm preparation	4	Exam preparation	10
10. Department	Department of Railway Vehicles and Vehicle System Analysis				
11. Responsible lecturer	Dr. Lovas László				
12. Lecturers	Dr. Galambosi Frigyes, Dr. Susánszki Zoltán				
13. Prerequisites	strong: KOJSM664 - Superstructure preliminary design				
14. Description of lectures					
Construction layouts, regarding manufacturing and tooling. Optimisation of superstructures (manufacturing, weight, stiffness).					
15. Description of practices					
16. Description of laboratory practices					
Complete superstructure design using CAD tools.					
17. Learning outcomes					
A. Knowledge					
<ul style="list-style-type: none">the student knows the usual processes in superstructure manufacturingknows the special requirements for manufacturing tubes, sheet metals, elastic coversknows the superstructure optimisation possibilities concerning shape, size and weightknows the principles for the continuous improvement in vehicle industry					
B. Skills					
<ul style="list-style-type: none">the student is able to prepare the core of a superstructure design of a given typeis able to prepare a design for easy manufacturingis able to optimize the superstructure layout upon given requirementsis able to perform a superstructure design task aloneis able to realize the sufficiently detailed numerical model of a superstructure					
C. Attitudes					
<ul style="list-style-type: none">the student makes an effort to gather all the available informations in a given domaincooperates with his fellow students and the teacheris open minded towards new and innovative ideas and researchesuses informatical and computational devices for his work					
D. Autonomy and Responsibility					
<ul style="list-style-type: none">the student is conscient about his responsibility towards the society and his companyasks for the colleagues' expertise and judgement when workingconsiders challenges with responsibility					
18. Requirements, way to determine a grade (obtain a signature)					
1 semestrial project work, 1 non-compulsory test. Details for computing the final mark can be find in the subject requirements.					
19. Opportunity for repeat/retake and delayed completion					
Second test possibility for those not present on the test, possibility of delayed deadline for homework					

20. Learning materials

Lecture notes

Effective date

10 October 2019

This Subject Datasheet is valid for

Inactive courses