



1. Subject name	Practice in technology of manufacturing and materials in vehicle industry				
2. Subject name in Hungarian	Jármű-anyagtechnológia projekt				
3. Code	BMEKOGGM648	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	0 (0) Lecture	2 (10) 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	22	Homework	26
Reading written materials	6	Midterm preparation	0	Exam preparation	10
10. Department	Department of Automotive Technologies				
11. Responsible lecturer	Dr. Bán Krisztián				
12. Lecturers	Dr. Bán Krisztián, Dr. Bánlaki Pál, Dr. Markovits Tamás, Hlinka József, Dr. Takács János, Dr. Lovas Antal				
13. Prerequisites					
14. Description of lectures					

15. Description of practices

The student is involved in an industrial R&D process or scientific research related to manufacturing technology or material technology in a department, in a sub-task that is solved with the help of a leading instructor. The student participate in the project meetings and reports held with the customer respectively to have an overview of the whole project process. The student acquires knowledge in the field of research methodology, acquires experimental design, and evaluates the management of measurement data in a computer environment. Student acquires experimental design, handling and evaluating measurement data in a computer environment.

16. Description of laboratory practices

Student carries out experiments, completes measurements as part of a project.

17. Learning outcomes

A. Knowledge

- Acquires knowledge of the project process and their design, subdivision and timing.
- Acquires knowledge of experimental design.
- Acquires knowledge of methods for evaluating measurement data.

B. Skills

- Depending on the complexity of the task, in a workgroup or independently she/he is able to plan a project process, break it down into part tasks, and schedule it in time.
- Depending on the complexity of the task, she/he is able to prepare an experimental project in a workgroup or independently.
- Depending on the complexity of the task, she/he is able to design and execute measurements or experiments in a workgroup or independently.
- Depending on the complexity of the task, she/he is able to process and interpret the results in a workgroup or independently.
- Able to provide a written or oral summary of the results of the subtask undertaken.
- Able to collect literature on a specific topic and compile a summary based on it.

C. Attitudes

- Strives to apply the knowledge acquired during the practices in the project task.
- Open to collaborate with the supervisor and his students.
- Seeks to improve communication.

D. Autonomy and Responsibility

- Accepts the frameworks for completing the subject, and performs its tasks independently and responsibly, in accordance with ethical norms.
- She/he is aware that the success of the project depends on her/him, so she/he is aware of his responsibilities.
- Tries to carry out the task entrusted to him independently and according to his knowledge, and if she/he feels the need, he asks for help from the supervisor.
- Apply responsibly to the knowledge acquired during the course with regard to their validity limits.

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

For fulfilling the requirements of signature, students submit a written summary of the completed task. During the verbal exam they report it verbally also, and the results of report gives the basis for the grade.

19. Opportunity for repeat/retake and delayed completion

The supplementation of the written work and oral report is possible during the supplementation week.

20. Learning materials

Educational materials of the department or, depending on the project task, individually agreed resources.

Effective date	10 October 2019	This Subject Datasheet is valid for	Inactive courses
-----------------------	-----------------	--	------------------