1. Subject name	**Accident analysis I., forensic processes**				
2. Subject name in Hungarian	Balesetelemzés I, szakértői eljárások				
3. Code	**BMEKOGGM654**	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	18
Reading written materials	8	Midterm preparation	10	Exam preparation	10
10. Department	**Department of Automotive Technologies**				
11. Responsible lecturer	Dr. Török Árpád				
12. Lecturers	Dr. Melegh Gábor, Dr. Török Árpád, Vida Gábor				
13. Prerequisites					

14. Description of lectures

Technical causes of accidents, vehicle and engine malfunctions: The most common high-risk vehicle and engine failures, fault finding process based on damage, determination of technical responsibility, conclusions, avoidance options. The role of the vehicles, the interpretation of the technical fault, the analysis of the technical accidents, the influence of the subjective causes.
Assessment of Accident Forms: Major Accident Forms and Conclusions from Post-Accident Status. Pedestrian Accidents, Basic Computational Opportunities, step outs like accidents , Accidents in Limited Visual circumstances, proving attempts.
Vehicle collisions: The basic contexts of the collision, vehicle deformations and damage patterns, energy grid, basics of collision calculation, edits, main procedures.

15. Description of practices

16. Description of labortory practices

Applying the relationships and procedures learned during the lectures during the analysis of specific tasks and accidents..

17. Learning outcomes

A. Knowledge
- The student is familiar with the legal framework needed to understand the legal environment of road safety;
- The student has to know the basic components of the process of legislation and law enforcement;
- The student has to know the basic purpose and means of transport law;
- The student has to know the online and printed aids and applications needed to apply traffic law.

B. Skills
- The student is able to interpret the related legislation;
- The student is able to apply and use relevant traffic laws;
- The student is able to support the planning and research and development processes.

C. Attitudes
- The student aims to maximize their abilities by making their studies at the highest possible level, proficient and independent;
- The student aims to cooperate with the instructor and the other students to improve knowledge;
- The student aims to continue to imrpove the knowledge of the material parts of the lessons through continuous independent learning;
- The student aims to use the information technology and computing tools (word processing computer software, mathematical software, image editing software, etc.), but also seeks to use classical devices (paper, ruler, pencil, hand-held calculator, editing, etc.);
- The student aims to get to know and routinely use the tools needed to solve the tasks;
- The student aims to provide accurate, error-free and precise work.

D. Autonomy and Responsibility

- The student is responsible for setting an example forthe other students rgarding the quality of its work and ethical standards;
- The student applies the knowledge acquired during the course in a responsible manner with regard to their validity limits;
- The student accepts openly the grounded critical remarks;
- The student accepts the framework for cooperation, can do its job independently or as part of a team, depending on the situation.

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, attending all labs and submitting the homework on accepted level.
Final outcome of the subject is defined by the result of the mid-term exam in 30% proportion, the homework in 20% proportion, and the final exam in 50% proportion. All requirements have to be fulfilled to successfully finish the subject.

19. Opportunity for repeat/retake and delayed completion

The midterm test can be retaken once. The homework 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