1. Subject name	Construction mechanization project planning methods				
2. Subject name in Hungarian	Építés gépesítés tervezése				
3. Code	BMEKOALM673	4. Evaluation type	mid-term grade	5. Credits	5
6. Weekly contact hours	1 (5) Lecture	2 (11) Practice		1 (5) 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	17	Homework	30
Reading written materials	31	Midterm preparation	16	Exam preparation	0

10. Department	Department of Material Handling and Logistics Systems
11. Responsible lecturer	Dr. Bohács Gábor
12. Lecturers	Dr. Bohács Gábor, Dr. Gyimesi András
13. Prerequisites	

14. Description of lectures

General features and application of project management in the construction industry. Construction project management tasks in construction project management. Construction machine systems, machine chains assembling. Resource and time planning in construction engineering. Determination of working parameters of earthmoving machinery and other construction machines with calculation and IT tools. Use of operating parameters in construction project management.

15. Description of practices

Solving calculation tasks, defining operating parameters, and machine matching tasks. Create and process a construction project project in a project management software environment.

16. Description of labortory practices

Presentation of working practices of industrial partners during plant visits.

17. Learning outcomes

A. Knowledge
- Know the concept of the project, the characteristics of the projects.
- Comprehensive knowledge of project management methods and the skills required
- Know the project-related tasks of construction machinery engineering.
- Know the characteristics and operating parameters of building machine systems and machine chains.
- Know the IT tools of project management and construction management.

B. Skills
- Able to apply its knowledge efficiently and in an integrated manner in project management engineering tasks.
- Consciously apply the learned optimization methods.
- It is capable of project planning tasks using technological parameters.
- Able to apply IT tools in project management.
- Is able to solve the problems that have arisen alone or in a team, to pass on his knowledge effectively.
- It has original, innovative ideas.

C. Attitudes
- Work at a high level in a group and independently.
- Searching for relationships with other subjects.
- Open to use math tools.
- Seek to get to know and routinely use the tools needed for solutions.
- Strive for accurate and error-free task solving.

D. Autonomy and Responsibility
- Develops solutions independently.

- Pay attention to the effects and consequences of your decisions.
- Use your systemic approach in your thinking.

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

During the semester, a midterm test is taken. The end of semester signing is a minimum to provide a sufficient level of two semi-annual planning tasks and at least a satisfactory outcome of the midterm test. The exam pass is 20% a at home, 30% for homework and 50% for written examination, which students can, if necessary orally. The homeworks' submission and the midterm test can both be resubmitted once.

19. Opportunity for repeat/retake and delayed completion

The homeworks' submission and the midterm test can both be resubmitted once.

20. Learning materials

Students can download the subject notes in pdf format via Moodle.

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