



1. Subject name	Innovation and entrepreneurship in transportation				
2. Subject name in Hungarian	Innováció és szolgáltatásfejlesztés a közlekedésben		3. Role	OC	
4. Code		5. Evaluation type	f	6. Credits	4
7. Weekly contact hours	1 lecture	3 practice	0 lab	8. Curriculum	K
9. Working hours for fulfilling the requirements of the subject					150 hours
Contact hours	56 hours	Preparation for seminars	7 hours	Homework	57 hours
Reading written materials	0 hours	Midterm preparation	0 hours	Exam preparation	0 hours
10. Department	Department of Transport Technology and Economics				
11. Responsible lecturer	Dr. Tóth János				
12. Lecturers	Aba Attila, Kózel Miklós, Dr. Esztergár-Kiss Domokos				
13. Prerequisites	- (-), -; - (-), -; - (-), -				
14. Description of lectures					
<p>The aim of the course is to give a theoretical and practical overview to the students about innovation and service development in order to gain experience for their career either as an entrepreneur or an employee. Topics: Importance of skills and their categorization. Innovation and value proposition processes. Principles and methodologies of customer centric product and service development (value proposition canvas, business canvas, persona canvas, affinity map). Basic principles of interview making. Customer journey analysis method. Idea development with creative tools. Methodology of pitch presentation.</p>					
15. Description of practices					
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16. Description of laboratory practices					
<p>Team course-project in a specific theme of transportation, where innovation and service development methodologies have to be applied.</p> <ol style="list-style-type: none"> 1. Team foundation, objectives definition. 2. Interview making with potential customers. 3. Problem identification. 4. Idea development. 5. Market introduction. 6. Pitch development. <p>Continuous consultation about the course project. The teams also reports in front of each other on their progress.</p>					
17. Learning outcomes					
<p>a) Knowledge:</p> <ul style="list-style-type: none"> - Knows the basic principle of innovation and service development. - Knows the theory and practice of innovation and service development methodologies. <p>b) Skills:</p> <ul style="list-style-type: none"> - Ability to see services and products with a business approach. - Ability to evaluate processes of transportation with a customer point of view. - Ability to effectively present ideas and suggestions. <p>c) Attitude:</p> <ul style="list-style-type: none"> - Strives to be creative and cooperative. - Open to new evaluation and presentation techniques. <p>d) Autonomy and responsibility:</p> <ul style="list-style-type: none"> - Able to identify technical aspects of a non-technical issue. - Responsibility applies for acquired knowledge in individual and in team work. 					
18. Requirements, way to determine a grade (obtain a signature)					
Students earn a grade for the semester course-project based on a continuous assessment of their progress.					
19. Retake and delayed completion					
On re-take week.					
20. Learning materials					
Lecture notes.					