



1. Subject name	Transport Infrastructure and Regional Development
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2. Subject name in Hungarian	Transport Infrastructure and Regional Development
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3. Code	BMEKOKKD006	4. Evaluation type	exam grade	5. Credits	3
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6. Weekly contact hours	1 (0) Lecture	1 (0) Practice	0 (0) Lab
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7. Curriculum	PhD Programme	8. Role	Specific course
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9. Working hours for fulfilling the requirements of the subject	90
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Contact hours	28	Preparation for seminars	14	Homework	22
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Reading written materials	18	Midterm preparation	0	Exam preparation	8
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10. Department	Department of Transport Technology and Economics
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11. Responsible lecturer	Dr. Mészáros Ferenc
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12. Lecturers	Dr. Mészáros Ferenc
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13. Prerequisites	
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14. Description of lectures

Transport infrastructure and development are linked, although the link between them is not straightforward. This course explores and analyses this link. Regional development and its measurement is scrutinized as is the monetarisation of infrastructure charging and calculation of costs. The course engages the disciplines of economics, regional planning, environmental science, geography, and sociology in investigating the externalities of transportation. The course aims to provide a practical and contemporary, but yet critical introduction to this subject. It will involve the study real and contemporary examples.

15. Description of practices

Definition of regional development. Indicators of sustainable regional development and green economics. Pricing transport use: charges, elasticities, time saving and road pricing. Describing relationship between transport improvements and economic activity. Traffic and transport infrastructure in condition of suppressed demand. Traffic demand management and reallocation of road space. Transport externalities: congestion on the road network, air pollution and greenhouse gas emission, noise annoyance, spatial inequalities and urban sprawl, social inequalities. Financing transport infrastructures. European policy on transport infrastructure and regional development.

16. Description of laboratory practices

17. Learning outcomes

- A. Knowledge
 - the student knows the definitions and interrelations of transport infrastructure and regional developments, gets know the sustainability goals and indicators.
- B. Skills
 - the student is able to identify and calculate/evaluate the wider impacts of transport infrastructure investments on the regional development.
- C. Attitudes
 - the student strives for completeness in the acquisition of knowledge, co-operates with the teacher and the other students, is open towards new and innovative ideas, researches and uses information technology and computing tools for its work.
- D. Autonomy and Responsibility
 - in addition to the narrow professional aspects, the student also takes into account social and economic aspects in the utilization of its knowledge, asks for the professional opinions of others, makes responsible decisions in the selection of the most efficient transport investments, and takes care of the challenges responsibly.

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

The students shall attend the at least 70% of lectures and at least 70% of seminars. The students shall individually work out a report about a selected and agreed case study analysis about wider impacts of a transport infrastructure investment and

submit until the last day of study period. There are two assessments during the semester: (1) a formative assessment is conducted based on continuous performance and activity at the subject's contact lessons (active participation, contributing thoughts, participation in organised teamwork and discussions, etc.) (signature, weight of 70% in final grade), (2) a formative assessment during the verbal exam based on the student's case study analysis with brief presentation (weight of 30% in final grade).

19. Opportunity for repeat/retake and delayed completion

The attendance requirements cannot be delayed completed. The individual case study report can be delayed submitted in the delayed completion period.

20. Learning materials

1. Caralampo Focas (2006) Transport Infrastructure and Regional Development. Course material, BME Department of Transport Economics, Budapest
2. Eddy Van de Voorde, Thierry Vanellander (2010) Applied Transport Economics, De Boeck
3. André de Palma , Robin Lindsey , Emile Quinet , Roger Vickerman (2011) A Handbook Of Transport Economics, Edward Elgar
4. Lecture slides

Effective date	27 November 2019	This Subject Datasheet is valid for	2024/2025 semester II
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