

I. Tantárgyleírás

1. Alapadatok

1.1 Tantárgy neve

URBAN AND REGIONAL DEVELOPMENT

1.2 Azonosító (tantárgykód)

BMEEOUVAT43

1.3 Tantárgy jellege

Kontaktórás tanegység

1.4 Óraszámok

Típus	Óraszám / (nap)
Előadás (elmélet)	2

1.5 Tanulmányi teljesítményértékelés (minőségi értékelés) típusa

Félévközi érdemjegy

1.6 Kreditszám

3

1.7 Tárgyfelelős

név	Dr. Orosz Csaba
beosztás	Egyetemi docens
email	orosz.csaba@emk.bme.hu

1.8 Tantárgyat gondozó oktatási szervezeti egység

Út és Vasútépítési Tanszék

1.9 A tantárgy weblapja

<https://epito.bme.hu/BMEEOUVAT43>

<https://edu.epito.bme.hu/course/view.php?id=381>

1.10 Az oktatás nyelve

magyar és angol

1.11 Tantárgy típusa

Kötelező az építőmérnöki (BSc) szakon

1.12 Előkövetelmények

1.13 Tantárgyleírás érvényessége

2020. február 5.

2. Célkitűzések és tanulási eredmények

2.1 Célkitűzések

Basic knowledge, abilities and skills in the following topics: Urban planning and infrastructure design. Basics. Connection between mobility planning and urban planning. Legal and administrative bases. Land-Use Planning. Historical development of infrastructure. [Channels, railways, roads, motorways, aviation, high speed railways] Case studies. Urban planning, development plans, regulations, actions. Regional development strategy of the European Union. Progress in Hungary. Strategic Environmental Monitoring. Water Framework Directive and its guidelines

2.2 Tanulási eredmények

A tantárgy sikeres teljesítése után a hallgató

A. Tudás

1. will learn the basics of Urban and Regional Development.
2. will learn the basic history of infrastructures and mobility. Will understand why previously implemented infrastructure supports the development.
3. will learn case studies of cities and regions developing, catching up or declining.
4. will learn the Regional development strategy of the European Union and its progress in Hungary.
5. will learn the basics of Strategic Environmental Monitoring.
6. will learn the principles and basics of the Water Framework Directive.

B. Képesség

1. will be able to estimate basic technical and economical effects and side effects.
2. will be able to set up basic models in urban and mobility planning and will be able to solve basic problems [parking management, road pricing, bridge tolls, public transport supply, etc.]
3. will be able to co-operate with other professionals – such as architects, landscape architects, sociologists, environmental experts etc.

C. Attitűd

1. cooperates with the tutor/lecturer and with fellow students, develops his/her co-working skills during the teamwork [HF1 – Homework 1.]
2. continuously extends his/her knowledge.
3. develops precise problem-solving skills.

D. Önállóság és felelősség

1. will be able to work autonomously and/or with individual research to complete his/her tasks.
2. is open to the comments and critics of teachers and fellow students.
3. co-operates with his/her fellow students.
4. is able to think in a total system.

2.3 Oktatási módszertan

Lectures, interactive lectures, case studies. Written and oral communication. Group work. Examples.

2.4 Részletes tárgyprogram

Week	Topics of lectures and/or exercise classes
1.	Effects of transportation development on urban planning and land use.
2.	Land use and mobility planning
3.	Taxes and road prices. Effects and side effects.
4.	Structure of cities.
5.	Concentration processes. The era of suburbanisation.
6.	Liveable, sustainable, competing cities and regions.
7.	"Kraft" Demand Model. Road prices in large cities. Case studies: Getafe-Madrid, Oslo, Stockholm. Lille –

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	Ebbsfleet.
8.	Case studies: Vienna, Prague and Budapest.
9.	Presentation of computer aided teamworks. Overview.
10.	Regional development strategy of the European Union.
11.	Regional development strategy of the European Union. Progress in Hungary.
12.	Regional development strategy of the European Union. Progress in Hungary.
13.	Strategic Environmental Monitoring. Overview.
14.	Water Framework Directive. Guidelines.

A félév közbeni munkaszüneti napok miatt a program csak tájékoztató jellegű, a pontos időpontokat a tárgy honlapján elérhető "Részletes féléves ütemterv" tartalmazza.

2.5 Tanulástámogató anyagok

On-line materials: Lectures and slides. On-line textbook.

2.6 Egyéb tudnivalók

Attendance to lectures is mandatory. A student who misses more than four lectures will not be able to earn credit for the course.

A museum visit mentioned on the semester schedule is mandatory (usually the Millennium Underground Museum).

2.7 Konzultációs lehetőségek

Teachers are available for consultation during their office hours, as advertised on the department website and on the semester schedule.

Jelen TAD az alábbi félévre érvényes:

Inactive courses

II. Tárgykövetelmények

3. A tanulmányi teljesítmény ellenőrzése és értékelése

3.1 Általános szabályok

The evaluation of the student's performance regarding the learning outcomes specified in clause 2.2. occurs via three midterm tests and a homework. The homework is a computer-based task done in groups of 3-4-5 people.

3.2 Teljesítményértékelési módszerek

Evaluation form	Abbrev.	Assessed learning outcomes
1. midterm test	MT "A"	A.2; A.3; B.1-B.3; C.2; C.3; D.4
2. midterm test	MT "B"	A.1; B.3; C.2
3. midterm test	MT "C"	A.4-A.6; B.1, B.3
1. group work	HW "A"	A.3; B.1-B.2; C.1-C.3; D.1-D.4

A szorgalmi időszakban tartott értékelések pontos idejét, a házi feladatok ki- és beadási határidejét a "Részletes féléves ütemterv" tartalmazza, mely elérhető a tárgy honlapján.

3.3 Teljesítményértékelések részaránya a minősítésben

Abbreviation	Score
MT "A" + HW "A"	51%
MT "B"	16%
MT "C"	33%
Összesen	100%

3.4 Az aláírás megszerzésének feltétele, az aláírás érvényessége

Signature cannot be obtained.

3.5 Érdemjegy megállapítása

If the student satisfies the attendance criteria, his/her mark will be determined as follows. The mid-semester result will be determined on the basis of the three tests and the homework. Criterion for completion of the subject is to obtain at least 50% of the total scores of all the three tests. Moreover, unsatisfactory performance of the homework will lead to a final mark 'failed' (1) independently of the result of the Tests.

The scores of MT "A" and HW "A" are added together for grading. The final grade is the weighted average of the grades of parts "A" "B" and "C" according to the weights given in point 3.3.

The calculation of grades is as follows:

Grade	%
excellent (5)	87
good (4)	75
satisfactory (3)	65
pass (2)	50
fail (1)	<50

3.6 Javítás és pótlás

1. The homework can be submitted with delay till a pre-defined late submission date – usually one week after the regular deadline – by paying a fee.
2. The homework submitted and accepted can be amended till the regular deadline without paying a fee.
3. The three midterm tests can be made up or repeated once during the semester. In case of a repeat, the new score will overwrite the previous score.
4. After paying the fee specified in the regulations, the student may make a second attempt to correct the

failed midterm test.

3.7 A tantárgy elvégzéséhez szükséges tanulmányi munka

Activity	Hours/semester
Contact houres	14×2=28
Preparation for the courses	14×1=14
Preparation for the tests	2×15=30
Group work	18
Sum	90

3.8 A tárgykövetelmények érvényessége

2025. február 10.

Jelen TAD az alábbi félévre érvényes:

Inactive courses