

Urban Transportation Planning II

Code: MK5KOZ2S4TX17-EN

ECTS Credit Points: 4

Evaluation: exam

Year, Semester: 1st year, 2nd semester

Its prerequisite(s): Urban Transportation Planning I

Further courses are built on it: No

Number of teaching hours/week (lecture + practice): 2 + 2

Topics:

History and role of public transportation in urban development, urban passenger transport modes, vehicle motion and performance, transit system performance, highway transit and bus rapid transit, rail transit and regional rail transit, unconventional transport systems, specialized technology systems, paratransit, characteristics and comparison of transit modes

Literature:

Required:

- Vukan R. Vuchic: Urban Transit; Wiley; Hoboken, New Jersey; 2007

Recommended:

- Gartner, Improta: Urban Traffic networks, Springer, 1995, ISBN 978-3-642-79641-8
- Bell, Kaparias, Mount: Urban Traffic Engineering and Streetscape Design, Imperial College Press, 2012

Schedule

1st week Registration week	
2nd week: Lecture: Basic terms in transportation planning, repetition. Practice: Design methods in transportation planning.	3rd week: Lecture: History and role of urban transport services. Practice: Capacity evolution of urban transport services.
4th week: Lecture: The different transport modes, terms, attributes, costs. Practice: Transport modes, calculation practice.	5th week: Lecture: Network principles. 101 basics in modelling of transport systems. Traffic control and influencing. Practice: Handling of homework.
6th week: Lecture: Environmental impacts of traffic. Air pollution, noise, groundwater hazard, animal life. Practice: Reduction principles on environmental impacts. Active and passive cutback possibilities.	7th week: Lecture: Rail transit. Railway planning. Introduction to trackbound design. Repetition of Bachelor level knowledge. General approach and issues. Practice: Consultation of homework.
8th week: 1st drawing week	
9th week: Lecture: Rail transit. Urban rail transit. Typical planning considerations.	10th week: Lecture: Rail transit, regional rail transit. State-of-the-art systems on commuter traffic.

Practice: Case studies of European and Asian cities.

11th week:

Lecture: Alternative transit options. Bus rapid transit. Design principles.

Practice: Streetscape design issues.

13th week:

Lecture: Paratransit, disability categories, properties, costs.

Practice: Planning issues about of paratransit.

Practice: Consultation of homework.

12th week:

Lecture: Unconventional urban transport systems. Trackbound types and other cabin systems.

Practice: Consultation of homework.

14th week:

Lecture: Mid-term test.

Practice: Handling of homework.

15th week: 2nd drawing week

Requirements

A, for a signature:

Participation at **practices** is compulsory. Students have to attend practice classes and may not miss more than three times during the semester. In case a student does so, the subject will not be signed and the student must repeat the course. Students cannot make up a practice with another group. Attendance be recorded by the practice leader. Being late counts as an absence. Active participation is evaluated by the teacher in every class. If a student's behaviour or conduct does not meet the requirements of active participation, the teacher may evaluate his/her participation as an absence due to the lack of active participation in class.

There is one test, at the end of the semester. A student can retake the test once if necessary. The test is valid if it reaches 51 points out of 100. A valid test is the requirement for the signature.

During semester, there is one homework to be submitted. An accepted homework is a requirement for the signature. The homework is valid if it reaches 51 out of 100 points. A valid homework is the requirement for the signature.

B, for a grade:

The course ends in an **examination grade**, based on the points of the tests, the homework and the exam. At the exam, further 200 points can be achieved.

Percent/ Grade: 0-50 % = fail (1); 51-62 % = pass (2); 62-73 % = satisfactory (3); 74-85 % = good (4); 86-100 % = excellent (5)