

Urban Transportation Planning I

Code: MK5KOZ1S4TX17-EN

ECTS Credit Points: 4

Evaluation: mid-semester grade

Year, Semester: 1st year, 1st semester

Its prerequisite(s): -

Further courses are built on it: Yes (Urban Transportation Planning II)

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

Topics:

Characteristics of road transportation. Road networks, categories. Vehicle proceeding in straight and circular sections. Speeds, impedances. Sight distances. Horizontal and vertical alignment, harmonization. Rural and urban intersections, sizing. Multi-level intersections. Implementing of roads. Planning phases. Agricultural roads. Materials of road structures.

Flexible and inflexible road structures.

Literature:

Required:

- [W. Kuhn](#) , [M.K. Jha](#): Fundamentals of Road Design (ISBN: 9781845640972)

Schedule

1st week Registration week	
2nd week: Lecture: Road types, standards, design parameters. Practice: Map, contour lines.	3rd week: Lecture: Horizontal and vertical alignment. Practice: Site-plan.
4th week: Lecture: Horizontal and vertical alignment Practice: Long-section.	5th week: Lecture: Junctions. Practice: Long-section.
6th week: Lecture: Junctions. Practice: practicing calculations.	7th week: Lecture: Test. Practice: Test.
8th week: 1st drawing week	
9th week: Lecture: Parking. Practice: Typical cross-section.	10th week: Lecture: Accessibility in transportation. Practice: Consultation of homework.
11th week: Lecture: Bicycle roads. Practice: Consultation of homework.	12th week: Lecture: Materials of road structures. Practice: Materials of road structures.
13th week: Lecture: Materials of road structures. Practice: Materials of road structures.	14th week: Lecture: Test. Practice: Test.
15th week: 2nd drawing week	

Requirements

A, for a signature:

Participation at **practice** 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 can't make up a practice with another group. Attendance at practice will be recorded by the practice leader. Being late is counted as an absence. Active participation is evaluated by the teacher in every class. If a student's behaviour or conduct doesn't 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.

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

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