# Public Works II

Code: MK5VIZ2S4TX17-EN

ECTS Credit Points: 4

Evaluation: exam

Year, Semester: 2nd year, 1st semester

Its prerequisite(s): Public Works I

Further courses are built on it: No

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

Topics:

This course presents basic technical parameters types of sewers. Group the sewer systems. Combined sewer system and separated sewer system. Pressure sewer system, vacuum sewer system.

Estimating wastewater flow. Sewer design. Storm water inlets. Manholes. The basic designing instructions are presented for public utilities.

Literature:

Required:

* Jonathan T. Ricketts, M. Kent Loftin, Frederick S. Merritt, Standard Handbook for Civil Engineers, McGraw-Hill Publishing Company, 2003; ISBN 0-07-136473-0
* Melvyn Kay, Practical Hydraulics, Taylor and Francis Group, 2008; ISBN 978-0-41535115-7

Schedule

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| 1st week Registration week |  |
| 2nd week:  Lecture: Group the sewer systems.  Practice: Film presentation. | 3rd week:  Lecture: Technical parameters, types of sewers.  Practice: Semester task issuing. |
| 4th week: | 5th week: |
| Lecture: Pressure sewer system.  Practice: Estimating wastewater flow. | Lecture: Vacuum sewer system.  Practice: Discussion. |
| 6th week:  Lecture: Sewer design theory.  Practice: Dimension the gravity waste water pipe. | 7th week:  Lecture: Modelling programs for sewer design.  Practice: Consultation. |
| 8th week: 1st drawing week |  |
| 9th week:  Lecture: SWMM program presentation.  Practice: Storm water inlets. | 10th week:  Lecture: Pipe systems and materials.  Practice: Discussion of pipe systems. |
| 11th week:  Lecture: New pressure sewer system.  Practice: Dimension the gravity storm water pipe. | 12th week:  Lecture: Manholes in the sewer system.  Practice: Place of the manholes. |
| 13th week:  Lecture: Type and function of the manholes.  Practice: Practical examples. | 14th week:  Lecture: Discussion of semester work and conclusions.  Practice: Semester task finishing and submit. |
| 15th week: 2nd drawing week |  |

Requirements

A, for a signature:

Attendance at lectures is recommended, but not compulsory.

Participation at practice is compulsory. Students have to attend the practice classes and may not miss more than three times during the semester. Students cannot make up a practice class with another group. Attendance at practice will be recorded by the practice leader. Being late counts as an absence. In case of further absences, a medical certificate needs to be presented. Missed practice classes should be made up for at a later date, to be discussed with the tutor. Students are required to bring the drawing tasks and drawing instruments for the course to each practice. 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.

Students have to submit semester drawing task as scheduled minimum at a sufficient level.

B, for a grade:

The course ends in a colloquium. Based on the average of the mark of the drawing and the colloquium result, the grade is calculated as an average of them.