

Course name: Water Supply

Course code: YCRKÖZ3BNF

Hours per week: 1 lecture / 3 practice / 0 laboratory; Exam/ 8 credit

Precondition for Erasmus students: 1 semester Water Utilities

In charge: College Prof. Dombay Gábor PhD

OBJECTIVE OF THE COURSE:

Design and operation of drinking water distribution systems. Modeling network hydraulics.

14 WEEKS SCHEDULE

1. week: Lecture: Distribution systems. Nomenclature
Practice: Overview of the design assignment of a drinking water distribution system
2. week: Lecture: Water demands. Practice: Water demands calculation
3. week: Lecture: Storage. Practice: Pumping schedule
4. week: Lecture: Lecture: Hydraulic analysis of networks. Practice: Storage calculation
5. week: Lecture: Hydraulic design and verification of networks. Practice: Consultation
6. week: Lecture: Hydraulic modeling. Practice: Consultation
7. week: Lecture: Pumping. Practice: Modeling application
8. week: Lecture: Evaluation of hydraulic calculations. Practice: Topological model setup
9. week: Lecture: Pipes and fittings. Practice: Determination of nodal demands
10. week: Lecture: Appliances, valves. Practice: Network simulations
11. week: Lecture: Storage facilities Practice: Consultation
12. week: Lecture: Water quality changes in the network. Practice: Hydraulic model evaluation
13. week: Modeling water quality changes. Practice: Consultation
14. week: Overview of the semester. Practice: Submission of the assignment

Assessment:

Midterm assignment and exam