



## COURSE DATASHEET

<b>Semester:</b>	2012/13/1
<b>Course:</b>	Soil- and Groundwater Protection
<b>Code:</b>	VEMKKVB112T
<b>Responsible department:</b>	Department of Environmental Engineering
<b>Department code:</b>	MKKV
<b>Responsible instructor:</b>	Dr. Erzsébet Horváth

---

### Course objectives:

knowledge in remediation technologies

### Course content:

1. Determinating parameters of migration of pollution in the soil; 2. Different water soluble and/or mixing pollutions in the soil and ground water; 3. Non-soluble pollutants 4. Reactions and degradation processes of pollutants in the soil and ground water; 5. Planning exercises of soil and groundwater protection for landfills I. 6. Planning exercises of soil and groundwater protection for landfills II. 7. Protection of ground- and drinking water 8. Sizing of protecting area; 9. Exploration of polluted area I.; 10. Exploration of polluted area II.; 11. Analysis of inorganic pollutions; 12. Analysis of organic pollutions; 13. Remediations, technologies; 14. Test 15. International experiences of remediated areas;

### Requirements, evaluation and grading:

test efficiency

### Required and recommended readings:

Hydrocarbon Contaminated Soils and Groundwater. : Calabrese, E. J., Kostecki, P. T., Lewis Publishers, 1992. ? Bear, J., Verrujit, A.: Modelling Groundwater Flow and Pollution, D. Reidel Publishing Co., 1987.