Yhd-12.135 Special course in hydrology (Hydrologian erikoisopintojakso), 2 credits

Spatial Planning and Site Construction Techniques for Environmentally Sound Urban Hydrology

Intensive graduate level course with lectures and guided exercises.

3-5 December 2007 at the Helsinki University of Technology, Espoo, Finland.

Content:
This course material ranges from an introduction to the current problems in urban hydrology such as flooding, degraded water quality in receiving water bodies, and habitat loss, to a selection of solution concepts and techniques. Watershed scale planning and Low Impact Development (LID) concepts are introduced as tools for accomplishing environmentally sound urban hydrology on a broad scale. Stormwater Best Management Practices (BMPs) or Natural Systems Stormwater Management Technicues such as open conveyance swales, constructed wetlands and ponds, and vegetated buffer zones are presented as site scale interventions leading to sustainable urban surface water management. Cold climate concerns are discussed as a specific challenge in water sensitive urban planning.

Host:
Water Resources Laboratory and The Graduate School for Real Estate, Construction and Planning (KIRSU); Helsinki University of Technology (TKK), Espoo, Finland

Responsible instructors:

Dr Outi Salminen
Water Resources Laboratory
Helsinki University of Technology (TKK)
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Finland

Director Dana Gumb
Staten Island Bluebelt Program
New York City Department of
Environmental Protection (NYC DEP)
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Admission is open to:
Doctoral students and advanced Master's students in applicable fields, e.g. Civil and Environmental Engineering, City Planning, and Landscape Architecture. To assure quality introduction at individual level, participation is limited to a total of 25 students. Applications and inquires are invited via e-mail stormwater@tkk.fi. Instruction is provided in English.

Credits:
During the full day in class lecture (50%) and course project (50%) period 3-5 December 2007 a take home assignment is given which is due via e-mail by 14 December 2007. Earning the full 2 credits necessitates the fulfillment of both attendance at the in class period and submission of the given assignment.

This course was made possible by fuding from the Helsinki University Graduate School for Real Estate, Construction and Planning (KIRSU).