TRANSFERRING ENVIRONMENTAL ENGINEERING AND SANITATION KNOWLEDGE – LONG DISTANCE LEARNING AND CO-OPERATIONS

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Environmental engineering and sanitation knowledge and management capabilities are key factors for a sustainable development of societies. Especially developing countries are lacking both, also appropriate knowledge is present in the world, but not available locally. The few skilled professionals are too busy with daily tasks, to keep them being up-to-date with the new trends of technology, especially in the field of environmental engineering. Providing access to information and giving support to make use of it will be essential.

Today, with the speed of the internet world-wide, obtaining a master’s degree without leaving the businesses and companies is possible.

The Bauhaus-Universität Weimar in cooperation with the Asian Institute of Technology (AIT) and University of Leeds under support of the KNOTEN WEIMAR therefore decided to develop an E-learning platform-based long-distance education model, which offers a full or part time MSc program on Environmental Engineering and Management (MSc EEM).

The study course impart knowledge within the scope of waste management, water- and wastewater management, emissions, energy, transportation as well as in the field of economic, planning and management of environmental and project-oriented issues. Thereby it is referred to concepts and solutions for industrial and economically developing countries.

The requirement for admission to the Course is a Bachelor or Master or comparable degree in one of the fields: Civil Engineering, Infrastructure Management, Water Management, Hydraulic Engineering, Hydrology, Construction Economics, Construction Management, Chemical Engineering, Supply and Disposal Engineering, Environmental Engineering, Environmental Technology, or comparable subjects. Applicants holding a university degree in another engineering or science subject as those listed above can also be admitted to the course if they can prove relevant job experience of at least 2 years or an adequate comprehensive advance studies. Further requirement for admission is adequate knowledge of the English language.

The M.Sc. in Environmental Engineering and Management (EEM) is comprised of 15 modules with 6 credit points (CP) each and a master thesis of 30 CP totalling to 120 CP. Depending on the individual workload the MSc EEM can take from 2 to 4 years.
Graduates of the Master course Environmental Engineering and Management will be responsible for environmental engineering issues, planning, design, development, operation, management and maintenance of urban technical infrastructure.

Important professional fields will be the infrastructure fields water supply, urban drainage, waste water management, transportation, waste and energy.

An important element of the course is the local presence. This was realised by co-operations. In addition to South-East Asian universities, the Bauhaus-Universität Weimar is in close contact with partner universities in South Africa. The co-operation between the University of South Africa (UNISA) and the Bauhaus-Universität Weimar is an example. The co-operations are confirmed by a memorandum of agreement which strengthens both partners’ competence in the areas of science and advanced technologies by means of exchanging of students and academic staff as well as the collaboration in distance/distributed education.

The combination of a sound long distance learning course and local co-operations will promote knowledge transfer to emerging economies worldwide along the lines of the idea of the European Higher Education Area to support the learning society approach for postgraduates with a specialisation in Environmental Engineering and Management.