The Urban Water Engineering and Management programme is jointly offered by the Asian Institute of Technology (AIT) and UNESCO-IHE Institute for Water Education (UNESCO-IHE). The UWEM programme is a double degree programme. Students who successfully complete this programme will be awarded two Master degrees: one from UNESCO-IHE and one from AIT. The degree students receive from UNESCO-IHE is the degree in Municipal Water and Infrastructure, with a specialisation in Urban Water Engineering and Management. AIT will award a degree in Urban Water Engineering and Management.

The Urban Water Engineering and Management programme is one of the few programmes worldwide that addresses the need for Master level professionals capable of delivering both water and wastewater services within the context of the urban water cycle, covering both technical and management aspects. As such, it is attractive to professionals from both the government sector and the water industry, particularly from developing and transitional countries.

DOUBLE DEGREE MASTER PROGRAMME IN URBAN WATER ENGINEERING AND MANAGEMENT

Context
The world is increasingly urbanised with 50% of the world’s population living in urban areas. By 2030 in Asia 54% will live in cities compared to 39% in 2005. This enormous growth of urban areas poses several challenges, such as delivery of essential water and sanitation services and the management of the urban water cycle. This is also recognised by the Millennium Development Goals and Targets established at the UN Millennium Summit in 2000. These challenges are further complicated due to climate change, and it is foreseen that coping with them requires a substantial increase of highly trained and qualified human resources.

Target group
The target group for this programme are professionals from urban water and wastewater authorities, urban development ministries/authorities, water and environment ministries, private companies, academia, NGOs and city and municipal authorities dealing with or interested in water and sanitation services and managing the urban water cycle.

Programme structure and contents
The Urban Water Engineering and Management Programme offers students the possibility to study in Bangkok, Thailand, and in Delft, the Netherlands, at two renowned institutes for international postgraduate education: AIT and UNESCO-IHE.

The coursework part of the programme starts at AIT in Bangkok in August, where students follow a number of courses until the second half of December. In early January, they move to Delft where they join students in UNESCO-IHE’s Municipal Water and Infrastructure programme for five modules and the international field trip. Students then either move back to Bangkok or remain in Delft for their additional coursework and individual thesis research work.

Subjects at AIT (August – December)
- Watershed Hydrology
- Drinking Water Treatment
- Wastewater Treatment
- Integrated Water Resource Management

Subjects at UNESCO-IHE (January – May)
- Integrated Infrastructure Concepts
- Urban Drainage and Wastewater Collection
- Water Sector and Utility Management
- Integrated Asset Management Systems
- Water Transport and Distribution
- International Fieldtrip & Fieldwork

At AIT or UNESCO-IHE (June onwards)
- Elective Subjects/Groupwork
- Thesis Proposal & Work

AIT part

UNESCO-IHE part

Thesis part

AIT

UNESCO-IHE
Participant’s profile
Candidates with a bachelor’s degree preferably in Civil, Environmental or Water Resources Engineering or related fields are eligible to apply. In principle, candidates should have a minimum of three years of practical or research experience since graduation. All applications are, however, considered on their individual merits. Since instruction and examinations are given in English, it is essential that participants have a good working knowledge of the English language. If there is any doubt about a candidate’s proficiency in English, he or she will be required to take one of the internationally recognised language tests before confirmation of admittance.

Admission procedure
Interested persons apply for admission with AIT, which can be done either online, or through regular post. More information on the application procedure (including the necessary forms) can be found on their website: www.ait.ac.th/admissions.

AIT will coordinate with UNESCO-IHE on admissions, and selected participants will receive an admission letter from both Institutes. The UNESCO-IHE admission letter is needed to apply for an NFP scholarship.

Key academic staff
UNESCO-IHE
Dr. E.O. Akinyemi
Prof. G.L. Amy
Prof. D. Brdanovic
Prof. M.P. van Dijk
Prof. J.B. van Lier
Dr. P.D.A. Pathirana
Dr. K.H. Schwartz
Drs. N. Trifunovic
Prof. K. Vairavamoorthy

AIT
Prof. Ajit Annachhatre
Dr. Mukand S. Babel
Dr. Roberto S. Clemente
Dr. Thammarat Kootatet
Dr. Nguyen T. Kim Oanh
Dr. Preeda Parkpian
Dr. Sylvain R. Perret
Prof. Chongrak Polprasert
Dr. Oleg Shipin
Prof. C. Visvanathan
Dr. Sutat Weesakul

The Asian Institute of Technology promotes technological change and sustainable development in the Asian-Pacific region through higher education, research and outreach. Established in Bangkok in 1959, AIT has become a leading regional postgraduate institution and is actively working with public and private sector partners throughout the region and with some of the top universities in the world. Recognized for its multinational, multi-cultural ethos, the Institute operates as a self-contained international community at its campus located 40 km north of Bangkok, Thailand. During your studies at AIT, you will meet fellow students from more than 40 countries around the globe. Besides the usual labs and academic buildings, the main campus includes housing, sports, and medical facilities, a conference center, and a library with over 230,000 volumes and 830 print and on-line periodicals. All serve to fulfil the AIT mission to develop highly qualified and committed professionals who play leading roles in the region’s sustainable development and its integration into the global economy.

UNESCO-IHE is at the centre of a vast international network of water related institutions, and functions as an interface between knowledge networks and centres, public and private sector organisations, scientific and professional associations and other members of the international water community. Through these partnerships, the Institute broadens its knowledge base and increases its effectiveness in responding to the demand for its services. As a participant, you profit from the professional contacts the Institute has made during its half a century of existence. When studying at UNESCO-IHE, you can expect to meet leading figures from the international water arena. Your professors and lecturers will put your study in the perspective of global dialogues and targets such as the Millennium Development Goals. The Institute’s approach applies an international perspective to solve domestic problems: think globally, act locally.

During your studies at UNESCO-IHE you will meet fellow participants from around the globe. Their cultures and professional experiences will allow you to taste the Institute’s network on a more personal level. Throughout the year the Institute hosts a number of activities that aim to make your life as pleasant as possible.

For the latest and in-depth information on the Urban Water Engineering and Management Programme, including content, programme and tuition fees please see: www.unesco-ihe.org/uwem or www.ait.asia/double-degree-uwem