

Joint Degree MSc Specialisation

Urban Water Engineering and Management

You will learn to deliver both water and wastewater services within the context of the urban water cycle, covering both technical and management aspects.



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 joint degree programme.

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.

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. 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.



UNESCO-IHE
Institute for Water Education



AIT
Asian Institute of Technology

PARTICIPANT'S PROFILE

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.

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.

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 post-graduate 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 Urban Water and Sanitation 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



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.

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