

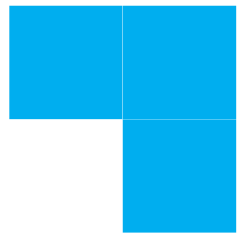
# DOUBLE DEGREE MASTER PROGRAMME

## AGRICULTURAL WATER MANAGEMENT FOR ENHANCED LAND AND WATER PRODUCTIVITY



### CONTEXT

The population growth - particularly high in emerging and developing countries - means that these countries have an additional challenge to meet the Millennium Development Goal of food security by increasing production in their own territory, where possible combined with increased import of food. Researches estimate that in the coming decades about 80-90% of the required increase will need to be realised on existing cultivated land, and about 10-20% on newly reclaimed land. For sustainable rural development, socio-economic and environmental aspects play crucial roles. It is also imperative that the modernisation of existing water management systems, including management transfers, remains a continued process. Increased vulnerability of agriculture is due to flooding caused partly by the impacts of climate change, land subsidence and the escalating value of land because of the requirement of higher yields per hectare. This necessitates the agricultural water management in such areas to be integrated with flood management and flood protection provisions. This Double Degree Master programme focuses on these issues.



The Agricultural Water Management for Enhanced Land and Water Productivity programme is jointly offered by the Asian Institute of Technology (AIT) and UNESCO-IHE Institute for Water Education (UNESCO-IHE).

The AWELWP 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 MSc degree in Water Science and Engineering, with a specialisation in Hydraulic Engineering - Agricultural Water Management for Enhanced Land and Water Productivity. AIT will award a degree in Water Engineering and Management.

### PARTICIPANT'S PROFILE

Candidates with a bachelor's degree preferably in Civil, Agricultural, or Environmental Engineering or related fields are eligible to apply. In principle, candidates should have a minimum of three years of practical or research experience in water management (irrigation, drainage) or on integrated rural development/management 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.

### TARGET GROUP

The target group for this programme are young professionals working at ministries, authorities, river basin and water users associations, universities, research institutes, civil society organisations, and consultants dealing with or interested in the fields of planning, water resources, agriculture, environment, public works, or related fields.

### ADMISSION PROCEDURE

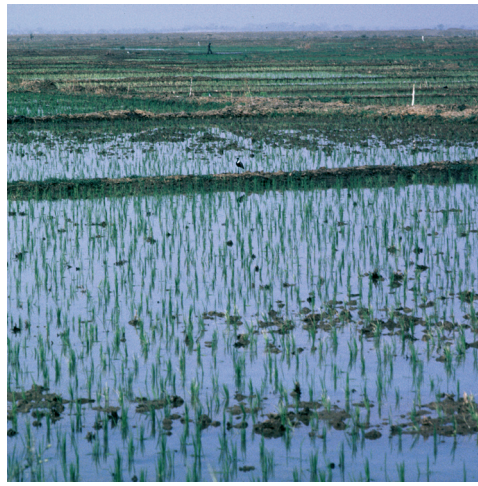
Interested persons apply for admission with AIT, which can be done either online, or through regular post. More information on the application procedure (including the necessary forms) can be found on their website: [www.ait.ac.th/admissions](http://www.ait.ac.th/admissions). AIT will coordinate with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



**AIT**  
Asian Institute of Technology

**UNESCO-IHE**  
Institute for Water Education





## PROGRAMME STRUCTURE

The Agricultural Water Management for Enhanced Land and Water Productivity 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 Water Science and Engineering programme for nine modules including the international field trip. Students then move back to Bangkok for their individual thesis research work.

## CONTENTS

### Subjects at AIT (August – December)

- Watershed Hydrology
- Hydrodynamics
- Irrigation and Drainage Engineering
- Integrated Water Resources Management

### Subjects at UNESCO-IHE (January – August)

- Water Management Systems and Agronomy I
- Water Management Systems and Agronomy II
- Aspects of Irrigation and Drainage
- Service Oriented Management of Irrigation Systems
- Conveyance Systems
- Fieldwork
- Irrigation and Drainage Structures
- Advanced Methods and Equipment
- Group work.

### At AIT (September onwards)

- Thesis Proposal & Work



## PARTNERS



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.

Recognised 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 Agricultural Water Management for Enhanced Land and Water Productivity programme, including content, programme and tuition fees please see [WWW.UNESCO-IHE.ORG/AWM](http://WWW.UNESCO-IHE.ORG/AWM)