

## Admissions and Scholarships to Study Water Engineering and Management (WEM) Program of the Asian Institute of Technology (AIT)

Water Engineering and Management (WEM) imparts education and training towards an understanding of the complexity of water cycle, utilization, and management. It offers a balanced curriculum covering both engineering and management aspects of water resources. WEM program covers five focal areas: Agricultural Water, Coastal Water, Urban Water, Water Resources, and Extreme Events & Risk Management. The curriculum is designed in such a way that students can specialize according to their interests. Courses such as Watershed Hydrology, Hydrodynamics, Water Resources Systems, and Concepts in Water Modeling provide the solid foundation to the advanced courses. The curriculum emphasizes tools and techniques in water resources planning and management.

Several scholarships are available on a competitive basis. The list of scholarships available can be accessed via: <https://www.ait.ac.th/admissions/scholarships/>. The following is the list of scholarships or fellowships (institute or school or program-wide) available:

- HM King's Scholarships
- GMSARN Scholarships
- ADB-JSP Scholarships
- Thai Pipe Scholarships
- Kurita Scholarships
- President Robert B. Banks Scholarships
- Joint Japan/World Bank Graduate Scholarships
- PR China Scholarships for Chinese Students
- RTG Scholarships/Fellowships

The **deadline of applications** to be considered for the scholarship for **August 2019 intake** is: **31 March, 2019**.

Interested individuals to study **Masters or PhD** in Water Engineering and Management (WEM) program can visit <http://wem.ait.ac.th/> to know more about WEM and visit the following website to learn about the admission process: <http://wem.ait.ac.th/admissions/>. Also follow Facebook page for the frequent updates about WEM's activities: [https://www.facebook.com/Water-Engineering-and-Management-926414151081321/?modal=admin\\_todo\\_tour](https://www.facebook.com/Water-Engineering-and-Management-926414151081321/?modal=admin_todo_tour)

WEM program composed of faculty members, laboratory supervisors and researchers from various regions:

- Prof. Ashim Das Gupta (Emeritus Professor)
- Prof. Tawatchai Tingsanchali (Emeritus Professor)
- Prof. Mukand S. Babel (Professor)

- Dr. Sangam Shrestha (Associate Professor)
- Dr. Mohana Sundaram (Assistant Professor)
- Dr. Sutat Weesakul (Adjunct Faculty)
- Dr. M. E. Asadi (Visiting Faculty)
- Mr. Arturo Roa (Senior Lab Supervisor)

In addition to the academic programs, WEM conducts several research projects, training and outreach activities on climate change impact and adaptation assessment on hydrology and water resources, irrigation management, flood risk assessment and management, groundwater development and management etc. Please visit the following websites to know more about selected projects under WEM:

- <http://connect-chf.com/> [Connecting climate change, hydrology, and fisheries for energy and food security in Lower Mekong Basin]
- <http://adaptgroundwater.org/> [Adapting groundwater of Asian cities to climate change: bridging the science and policy interface]
- [https://wle-mekong.cgiar.org/essential\\_grid/mk-25-developing-an-operational-framework-for-river-health-assessment-in-the-mekong-river-basin/](https://wle-mekong.cgiar.org/essential_grid/mk-25-developing-an-operational-framework-for-river-health-assessment-in-the-mekong-river-basin/) [Developing an operational framework for river health assessment in the Mekong River Basin]

Please write to [wemait@ait.asia](mailto:wemait@ait.asia) if you have any queries regarding the admissions, scholarships, and fellowships. Please find the attached brochure of WEM.



## Water Engineering and Management

### Why Water Engineering and Management ?

Today's major challenges for water engineers and managers include securing water for people and for food production, protecting vital ecosystems, and dealing with climate variability and change and uncertainty of water in space and time.

Water Engineering and Management (WEM) imparts education and training towards an understanding of the complexity of water cycle, utilization, and management. It offers a balanced curriculum covering both engineering and management aspects of water resources. Students acquire knowledge and hands-on practice in tools and techniques to come up with viable and sustainable water management for water, food, energy, and environmental security. Students conduct research on country-specific water related problems, and have opportunities to join research and internship programs with industries and partners.

### Academic Programs

#### Masters and Doctoral Degree Program

WEM offers academic programs leading to Masters Degree, Doctoral Degree, Professional Masters Degree, and Diploma and Certificates covering five focal areas: *Agricultural Water, Coastal Water, Urban Water, Water Resources, and Extreme Events and Risk Management*. For further details, please visit [www.set.ait.asia/wem/](http://www.set.ait.asia/wem/)

#### Double Degree Masters Program .

- Urban Water Engineering and Management (UWEM) in collaboration with UNESCO-IHE, The Netherlands and Environmental Engineering and Management field of study at AIT
- Agricultural Water Management for Enhanced Land and Water Productivity (DD-AWELWP) in collaboration with UNESCO-IHE, The Netherlands
- Hydroinformatics and Water Management (HWM) in collaboration with The University of Nice, Sophia Antipolise, France

#### Distance-based Program

- Integrated Water Resources Management (IWRM) in collaboration with UNU-INWEH, Canada
- Service Oriented Management of Irrigation Systems (SOMIS) in collaboration with UNESCO-IHE, The Netherlands

### Outreach Activities

WEM also conducts customized training programs, short courses, seminars, and workshops by inviting experts and practitioners from the region and across the globe.

### Courses Offered

- Watershed Hydrology
- Water Resources Systems
- Hydrodynamics
- Concepts in Water Modeling
- Irrigation and Drainage Engineering
- Irrigation and Drainage Systems Management
- Coastal and Estuarine Processes
- Coastal Zone Management
- Water Supply and Sanitation
- Urban Drainage Management
- Climate Change and Water Resources
- River Engineering and Modeling
- Groundwater Development and Management
- Integrated Water Resources Management
- Land and Water Conservation and Management
- Modeling of Water Resources Systems
- Floods and Droughts
- Flood Modeling and Management
- EIA and GIS Applications in Water Resources
- Research Design and Experimental Methods



## Laboratory Facilities



- Hydraulics Laboratory
- Soil and Water Laboratory
- Irrigation Experimental Field
- Hydro-meteorological Station

## Key Partners

- UNESCO-IHE, The Netherlands
- UNSA, France
- CIRAD, France
- UNU-INWEH, Canada
- UNU, Japan
- WRU, Vietnam
- K-Water, Korea
- DHI Water and Environment, Denmark
- BAPPENAS, Indonesia
- Tohoku University, Japan
- Kyoto University, Japan
- Yamanashi University, Japan
- TUBS, Germany
- IGES, Japan



## Faculty and Staff



### Prof. Ashim Das Gupta

adg@ait.asia

Integrated Water Resources Management; Groundwater Development and Management; Modeling and Monitoring



### Prof. Tawatchai Tinganchai

tawatchait@ait.asia

Open Channel Hydraulics and Sediment Transport; River Engineering and Modeling; Flood Control and Mitigation; Flood Hazard and Risk Assessment



### Prof. Mukand S. Babel

msbabel@ait.asia

Hydrology; Water Supply and Sanitation; Water Resources Management; Modeling of Water Resources; Climate Change



### Dr. Sutat Weesakul

sutat@ait.asia

Hydraulic and Coastal Engineering; Urban Drainage; Physical Hydraulic Modeling



### Dr. Sangam Shrestha

sangam@ait.asia

Climate Change and Adaptation; Integrated Water Resources Management; Groundwater Development and Management



### Dr. Duc Hoang Nguyen

duch@ait.asia

River and Coastal Engineering; Hydrodynamic Modeling; Flood Modeling and Management, Water Quality and Sediment Transport; Reservoir Operation



### Dr. Sanyogita Andriyas

s-andriyas@ait.asia

Agricultural Water Management; High Efficiency Irrigation Systems; GIS Applications in Agriculture; Machine Learning Algorithms in Water Management



### Engr. Arturo G. Roa

Laboratory Supervisor

artgroa@ait.asia



### Ms. Pajee Trakanpasakul (Tuk)

Administrative Secretary

pajee@ait.asia

## Financial Support

A limited number of financial awards in the form of scholarships or fellowships for the Masters and Doctoral programs, on a highly competitive basis is available. Students however may have to supplement the AIT support with their own resources.

## Admission Requirements

Applicants for Masters Program must have an undergraduate degree preferably in Civil, Water Resources, Agricultural, Environmental Engineering or related fields. For Doctoral Program, applicants must have a Masters Degree in Water Resources or other water related areas.

To apply online or download application forms, please go to <http://www.ait.asia/apply>

For a FAQ on applications, please visit: <http://www.ait.asia/admissions/FAQ.html>

### Admission and Scholarship Inquiries:

Admissions and Scholarships Office  
P.O. Box 4, Klong Luang, Pathumtani 12120, Thailand  
Tel: (66-2) 524 5032 to 33, Fax: (66-2) 524 6326  
Email: [admissions@ait.asia](mailto:admissions@ait.asia)

## About AIT

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. AIT's mission is to develop highly qualified and committed professionals who play leading roles in the region's sustainable development and its integration into the global economy. For further details please visit [www.ait.asia](http://www.ait.asia)

## About SET

The School of Engineering and Technology aims to develop highly qualified engineers and technologists who play leading roles in promoting the region's industrial competitiveness in its integration into the global economy. For further details please visit [www.set.ait.asia](http://www.set.ait.asia)

