

ABOUT INSTITUTE OF WATER AND FLOOD MANAGEMENT (IWFM)

To address the challenging water management issues, the Institute of Flood Control and Drainage Research was established in 1974 and later renamed as the Institute of Water and Flood Management (IWFM) in 2002. The Institute pursues research and capacity development in the field of water and flood management that is vital for economic development and social prosperity of the country. IWFM has long been offering Water Resources Development (WRD) program since 2002, and is going to start two new degree programs: Climate Modeling and Risk Management (CMRM) and Humanitarian Engineering (HE), from this year.

Background

Water Resources Development (WRD)

Bangladesh is predominantly a floodplain country where water is key to socio-economic development and sustainability of the eco-system. Flood, drought, cyclone, river erosion, siltation, and water scarcity in dry season have made water management a challenging task. The gradual degradation of the environment due to human interventions is adding further complexities to water management. The Institute offers post graduate degrees for the professional and fresh graduates in water resources development with the objectives of training and enhancing the knowledge and skills of professionals in planning and management of land and water resources, and widening their perspectives on Integrated Water Resources Management (IWRM).

Climate Modeling and Risk Management (CMRM)

Bangladesh is one of the most vulnerable countries to climate change. Adaptation to the climate risk in order to sustain the development gains made in recent years will remain a significant challenge for the country in the years to come. Capacity development in modeling climate change scenarios and then management of climate change risk is a prerequisite for addressing this challenge successfully. In this regard, IWFM is offering a post graduate degree program in Climate Modeling and Risk Management.

Humanitarian Engineering (HE)

Humanitarian challenges require people trained with a broad perspective who can communicate with different parties of different backgrounds. Humanitarian engineering combines multiple disciplines in order to address humanitarian emergencies, especially to improve the well-being of poor, marginalized, and/or under-served communities. In the current times where various humanitarian crises are occurring, professionals with a set of integrated, interdisciplinary skills are needed to tackle actual societal challenges. IWFM is offering post graduate degrees in humanitarian engineering with a view to developing professionals trained in humanitarian engineering, who will play a pivotal role in the solution of humanitarian challenges, enabling our society toward sustainable human development.



POST GRADUATE PROGRAMS



INSTITUTE OF WATER AND FLOOD MANAGEMENT (IWFM)

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



DEGREES OFFERED

Water Resources Development (WRD)

- (a) Master of Science in Water Resources Development (WRD) abbreviated as M.Sc. (WRD)
- (b) Doctor of Philosophy abbreviated as Ph.D.

Climate Modeling and Risk Management (CMRM)

- (a) Master of Science in Climate Modeling and Risk Management (CMRM) abbreviated as M.Sc. (CMRM)
- (b) Doctor of Philosophy abbreviated as Ph.D.

Humanitarian Engineering (HE)

- (a) Master of Science in Humanitarian Engineering abbreviated as M.Sc. Engg. (HE)
- (b) Master of Engineering in Humanitarian Engineering abbreviated as M.Engg. (HE).
- (c) Doctor of Philosophy abbreviated as Ph.D.



Please scan to visit the official website of **Institute of Water and Flood Management (IWFM)** for further information regarding the admission process.

<https://iwfm.buet.ac.bd/site/>



Our Location:

Institute of Water and Flood Management Building
Bangladesh University of Engineering and Technology
Rashid Hall Connecting Road
Dhaka 1000



WATER RESOURCES DEVELOPMENT (WRD)

Admission Requirements

For admission to the courses leading to M.Sc. (WRD) an applicant-

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S. S. C and H. S. C or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have obtained a Bachelor's degree in Civil Engineering/ Water Resources Engineering/ Agricultural Engineering/ Environmental Science or its equivalent from any recognized institution having a minimum GPA of 2.50 out of 4.0 or its equivalent.

For admission to the courses leading to a Ph.D. degree a candidate

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S.S.C. and H.S.C. or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent in B. Sc. Engg. / four-year B. Sc. degree / BURP in the relevant branch.
- must have a minimum GPA of 2.75 out of 4.0 or its equivalent in M. Sc. Engg. / M. Engg. / M. Sc. in relevant branch.
- For Water Resources Development, the minimum qualification for admission shall normally be an M.Sc. Engg./M.Engg. degree in Civil Engineering/ Water Resources Engineering/ Environmental Engineering/ Agricultural Engineering or M.Sc. degree in Water Resource Development or its equivalent from any recognized Institution.
- A student already working for an M.Sc.Engg./ M.Phil./ MURP/ M. Arch./ M.Sc.(WRD) degree at this University and showing excellent progress and promise in thesis work may be provisionally transferred to the Ph.D. degree program after completion of M.Sc. Engg./ M.Phil./ MURP/ M.Arch./ M.Sc.(WRD) course work with a minimum GPA of 3.0 out of 4.0 on approval of the Committee for Advanced Studies and Research (CASR) on the recommendation of the relevant Board of Post Graduate Studies (BPGS)/Research and Academic Committee (RAC).

HUMANITARIAN ENGINEERING (HE)

Admission Requirements

For admission to the courses leading to M.Sc. Engg. (HE) and M. Engg. (HE) an applicant

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S. S. C and H. S. C or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have obtained a B.Sc. Engg. Degree in Civil Engineering / Civil and Environmental Engineering / Civil and Water Resources Engineering / Environmental Engineering / Water Resources Engineering / Agricultural Engineering or an equivalent degree from any recognized institution with at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent.

For admission to the courses leading to a Ph.D. degree a candidate

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S.S.C. and H.S.C. or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent in B. Sc. Engg. / four-year B. Sc. degree / BURP in the relevant branch.
- must have a minimum GPA of 2.75 out of 4.0 or its equivalent in M. Sc. Engg. / M. Engg. / M. Sc. in relevant branch.
- For Humanitarian Engineering, the minimum qualification for admission shall normally be an M.Sc. Engg./M.Engg. degree in Civil Engineering/Water Resources Engineering / Environmental Engineering / Agricultural Engineering / Humanitarian Engineering or its equivalent from any recognized Institution.
- A student already working for an M.Sc. Engg. (HE) degree at this University and showing excellent progress and promise in thesis work may be provisionally transferred to the Ph.D. degree programme after completion of M.Sc. Engg. (HE) course work with a minimum GPA of 3.0 out of 4.0 on approval of the Committee for Advanced Studies and Research (CASR) on the recommendation of the Research and Academic Committee (RAC).

CLIMATE MODELING AND RISK MANAGEMENT (CMRM)

Admission Requirements

For admission to the courses leading to M.Sc. (CMRM) an applicant

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S. S. C and H. S. C or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have obtained a Bachelor's degree in Civil Engineering / Water Resources Engineering / Agricultural Engineering / Environmental Science/Urban and Regional Planning or its equivalent from any recognized institution with at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent

For admission to the courses leading to a Ph.D. degree a candidate

- must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S.S.C. and H.S.C. or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.
- must have at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent in B. Sc. Engg. / four-year B. Sc. degree / BURP in the relevant branch.
- must have a minimum GPA of 2.75 out of 4.0 or its equivalent in M. Sc. Engg. / M. Engg. / M. Sc. in relevant branch.
- For Climate Modeling and Risk Management, the minimum qualification for admission shall normally be an M.Sc. Engg./M.Engg. degree in Civil Engineering/Water Resources Engineering / Environmental Engineering / Agricultural Engineering or M. Sc. degree in Climate Modeling and Risk Management or its equivalent from any recognized Institution.
- A student already working for an M.Sc. (CMRM) degree at this University and showing excellent progress and promise in thesis work may be provisionally transferred to the Ph.D. degree program after completion of M.Sc. (CMRM) course work with a minimum GPA of 3.0 out of 4.0 on approval of the Committee for Advanced Studies and Research (CASR) on the recommendation of the Research and Academic Committee (RAC).



পানি ও বন্যা ব্যবস্থাপনা ইনস্টিটিউট
Institute of Water and Flood Management (IWFM)
Bangladesh University of Engineering and Technology (BUET)



WATER RESOURCES DEVELOPMENT (WRD)

Courses Offered

- WFM 6000: Thesis [18.0 Credit Hours for M.Sc. (WRD) and 45.0 Credit Hours for Ph.D.]
- WFM 6002: Special Studies
- WFM 6101: Alluvial River Processes
- WFM 6102: Advanced Watershed Hydrology
- WFM 6103: Hydrologic Information System
- WFM 6104: Water, Gender and Society
- WFM 6105: Water and Ecosystem
- WFM 6201: Hazards and Risk Analysis
- WFM 6202: Remote Sensing and GIS in Water Management
- WFM 6203: Environmental Economics
- WFM 6204: Hydrologic Statistics
- WFM 6205: Hydrologic Design for Water Use
- WFM 6206: Groundwater Resource Assessment
- WFM 6207: Water Resources System Analysis
- WFM 6208: Choice of Water Management Technology
- WFM 6209: Interdisciplinary Field Research Methodology in Water Management
- WFM 6301: Agricultural Water Management
- WFM 6302: Water Development Project Planning
- WFM 6303: Integrated Water Resources Management
- WFM 6304: River and Floodplain Management
- WFM 6305: Coastal Zone Management
- WFM 6306: Urban Water Management
- WFM 6307: Water Control Structures
- WFM 6308: Risk Management
- WFM 6309: Water Quality Management
- WFM 6310: Water Disaster Management
- WFM 6311: Climate Change Risk Management

HUMANITARIAN ENGINEERING (HE)

Courses offered

- HE 6000: Thesis [18.0 Credit Hours for M.Sc. Engg. (HE) and 45.0 Credit Hours for Ph.D.]
- HE 6000: Project [6.0 Credit Hours for M. Engg. (HE)]
- HE 6101: Humanitarian Challenges and Climate Adaptation in Water Engineering
- HE 6102: Disaster Risk Reduction and Community Resilience
- HE 6103: Water, Agriculture and Food Security
- HE 6201: Humanitarian Engineering: Ethics, Theory and Practices
- HE 6202: Humanitarian Response to Disasters
- HE 6203: Public Health Engineering
- HE 6204: Ecosystem Services and Sustainable Community Development
- HE 6205: Urban Water Disaster Engineering
- HE 6206: Coastal Disaster Mitigation Engineering
- HE 6301: Community Based Engineering in Water Management
- HE 6302: Water Rights and Transboundary Water Management
- HE 6303: Pollution and Protection of Water Resources
- HE 6304: Harmonizing Disaster Management and Environmental Conservation
- HE 6305: Hydraulic Engineering for Infrastructure Development and Management
- HE 6306: Integrated Natural Resources Management in Watersheds

Existing Courses from Water Resources Development (WRD):

- WFM 6104: Water, Gender and Society

CLIMATE MODELING AND RISK MANAGEMENT (CMRM)

Courses offered

- CMRM 6000: Thesis [18.0 Credit Hours for M.Sc. (CMRM) and 45.0 Credit Hours for Ph.D.]
- CMRM 6201: Climate and Earth Systems Modeling
- CMRM 6202: Numerical Modeling in Water and Sediment Transport
- CMRM 6203: Integrated Modeling
- CMRM 6204: Application of Remote Sensing in climate change
- CMRM 6205: Climate Data Processing, Analysis, and Management
- CMRM 6206: Vulnerability Assessment

Existing Courses from Water Resources Development (WRD):

- WFM 6102: Advanced Watershed Hydrology
- WFM 6201: Hazards and Risk Analysis
- WFM 6305: Coastal Zone Management
- WFM 6311: Climate Change Risk Management

APPLICATION DEADLINE

Deadlines will be available on IWFM website soon.

পানি ও বন্যা ব্যবস্থাপনা ইন্সটিটিউট
Institute of Water and Flood Management (IWFM)
Bangladesh University of Engineering and Technology (BUET)





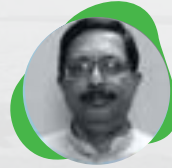
FACULTY MEMBERS OF IWFM



DR. MD. REZAUR RAHMAN
Professor



DR. ANISUL HAQUE
Professor



DR. M. SHAH ALAM KHAN
(On leave)
Professor



DR. MD. MUNSUR RAHMAN
Professor



DR. G M TAREKUL ISLAM
Professor



DR. MASHFIQUS SALEHIN
Professor



DR. SUJIT KUMAR BALA
(On PRL)
Professor



DR. M. SHAHJAHAN MONDAL
Professor



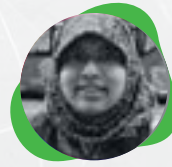
DR. A.K.M. SAIFUL ISLAM
Professor and Director



DR. MOHAMMAD ASAD HUSSAIN
Professor



DR. MOHAMMED ABED HOSSAIN
Professor



DR. SARA NOWREEN
Associate Professor



DR. SONIA BINTE MURSHED
Associate Professor



DR. SHAMPA
Assistant Professor



DR. SHAMMI HAQUE
Assistant Professor



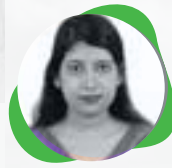
DEBANJALI SAHA
Assistant Professor



DR. AHMED ISHTIAQUE AMIN CHOWDHURY
Assistant Professor



MD. RASHEDUL ISLAM
(On leave)
Assistant Professor



BINATA ROY
(On leave)
Assistant Professor



PARTHO DAS
(On leave)
Assistant Professor



TANJILA AKHTER
(On leave)
Assistant Professor



MD SHADMAN SAKIB
Assistant Professor



MD. ENAYET CHOWDHURY
Lecturer



FARIHA ISLAM MOU
Lecturer



ZARIN TASNIM
Lecturer

INTERNATIONAL PERSPECTIVES ON WATER RESOURCES AND THE ENVIRONMENT (IPWE) CONFERENCE 2023

