

DAAD Global Centres for Climate and Environment

Global Water and Climate Adaptation Center

ABCDCENTRE (Aachen – Bangkok – Chennai – Dresden)

***M.Sc. Water Security and Global Change
Joint Master Programme***

11.04.2024

Set-Up



Aachen, Germany



Bangkok, Thailand



Chennai, India



Dresden, Germany



Seeking Water for Survival, Ziaul Huque, 2019 <https://epoty.org>



Water Security Climate Adaptation



Aceredo, Brais Lorenzo Couto, 2022 <https://epoty.org>



Water
hazardous element &
most desired asset

Operative Structure



Teaching

Development of a new joint Master Programme „Water Security and Global Change“

Integration of existing programmes

Invited scientists

Research

Future Environmental Leaders (FEL)

Mobility Funds

Funded stays for postdocs

Initiating & implementing joint projects

Transfer

Dialogue beyond academia

Targeted formats

Innovative knowledge

Research with Impact – SDGs in Focus

Cluster I: “**Water Security**, Water Resources Management, Droughts Management, Secure Water Supply”

Cluster II: “**Ecosystem** Resilience and Nature-Based Adaptation Measures”

Cluster III: “**Transfer** Strategies for Climate Adaptation:
Traditional Knowledge, Local Economies and Societal Acceptance”



Joint M.Sc. Program “Water Security and Global Change”



Please apply until the 30.04.2024 <https://abcd-centre.org/master-program/>

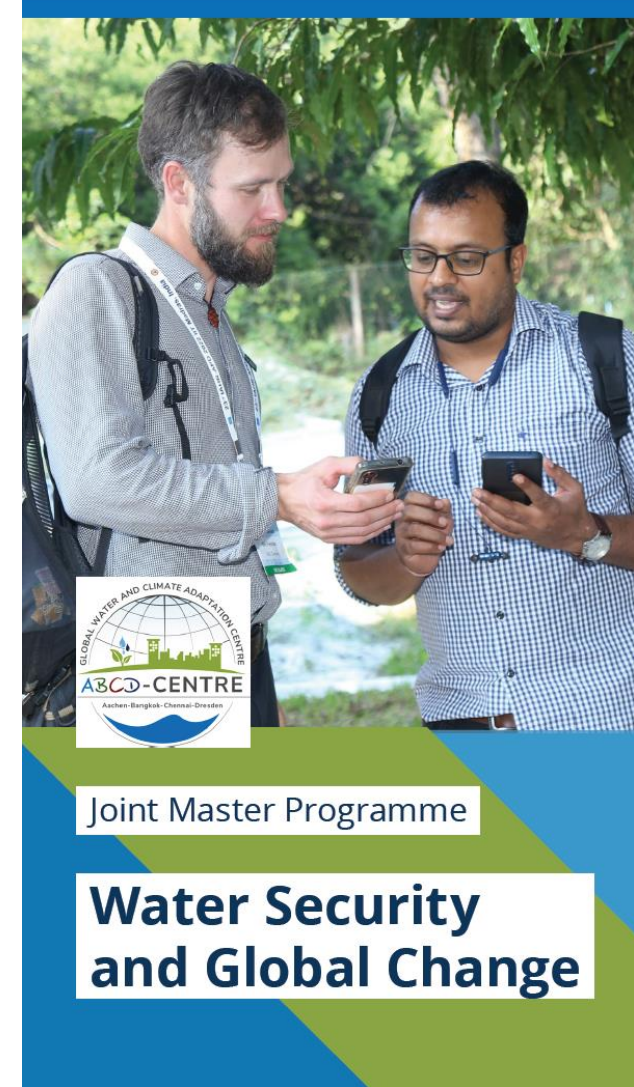


Joint study programme

Joint degree

Degree: Master of Sciences (M.Sc.)

Certificate: Joint Certificate issued by coordinating Institution (IITM) with logos and signatures from all 3 degree awarding partners



Modules

First Semester

Aug - Dec (IITM)

Physics-Chemical Processes for Water & Wastewater Treatment (7,5 ECTS) (M)
Sustainability in River Basin Management (5 ECTS) (M)
Water, Health and Hygiene (5 ECTS) (M)

Oct - Feb (TUD+ RWTH)

Climate Adaptation in Coastal and Hydraulic Engineering (5 ECTS) (M)
Ground Water (5 ECTS) (M)

Second Semester

Jan - May (IITM)

Water Resources Planning & Management (7.5 ECTS) (M)
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Apr - Sep (RWTH + TUD)

Flood Protection (5 ECTS)
Urban Water Management (5 ECTS) (M)
Hydraulic Engineering (5 ECTS) (M)

Contaminant Transport Modelling (5 ECTS) (E)
Ocean Env policy and coastal zone mgmt. (5 ECTS) (E)
Technology & Sustainable Development (5 ECTS) (E)
Coastal Engineering (5 ECTS) (E)

Environment, Local Economies and Resource Conflict (5 ECTS) (E)
Geographic Information Systems in Water Management I (4 ECTS) (E)
Hydrodynamic Simulation (4 ECTS) (E)
Coastal Engineering (4 ECTS) (E)
Seminar on Hydraulic Engineering (3 ECTS) (E)



RWTH Aachen

TU Dresden

IITM Chennai

Modules

Third Semester

Oct – Mar (RWTH)

Oct-Mar (TUD)

International Project Management (5 ECTS) (M)	Water extremes - Risk Management and Adaptation (5 ECTS) (M)
Technological Modernization and Globalization (5 ECTS) (M)	



Elective (Choose 3 courses from 6 courses below) 1 from RWTH Aachen and 2 from TUD/UNU

Numerical Modelling in Water Resources Management (5 ECTS)
Global Changes and Sustainable Development (4 ECTS)
Geographical Information Systems in Water Management II (4 ECTS)
Flood Risk Management (4 ECTS)
Sediment Transport and Morphodynamics (4 ECTS)
Industrial Waste Water Treatment (4 ECTS)
Sanitary Engineering in Developing Countries (2 ECTS)
Environment Local Economies and Resource Conflict (5 ECTS)
Climate Change (from Meteorology) (5 ECTS)
International Water Issues (5 ECTS)
Natural Forest Management and Restoration in the Tropics (5 ECTS)
Watershed Management (Modelling HEC, Basement, Habitat) (5 ECTS)
Environmental Perspectives on Resource Nexus (5 ECTS) (UNU-FLORES)
From Concept to Policy and Practice Impact: Advancing the Resource Nexus (5 ECTS) (UNU-FLORES)

1 Option
2 Option

Fourth Semester

March – July

Master thesis in one of 3 locations

Our Scholarships

Take a look on the opportunities we offer

[Professors and Seniors](#)

[Master and Doctoral Students](#)

[Future Environmental Leaders](#)



Future Environmental Leaders

Call for Applications for Doctoral Students from the Global South. ABCD Future Environmental Leaders...

Thank you for your attention!

www.abcd-centre.org

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