



HIGH-LEVEL POLITICAL FORUM
ON SUSTAINABLE DEVELOPMENT



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CONCEPT PAPER

UNITAR GLOBAL WATER ACADEMY

*A new Initiative launched under
the Auspices of the President of the
77th UN General Assembly*



Background to the water sustainability crisis

The survival of humans, and indeed, all life, depends upon access to clean freshwater. Humans rely on water for hydration, food production, sanitation, hygiene, and transportation. The United Nations has declared that access to clean water and sanitation is a basic human right in Sustainable Development Goal 6. Specifically, Sustainable Development Goal Target 6.1 calls for “equitable access to safe and affordable drinking water by 2030” (United Nations 2015). Nevertheless, over 2 billion people worldwide do not have access to safe drinking water in their homes, contributing to 3.5 million deaths annually (United Nations Children’s Fund and World Health Organization 2019).

Freshwater is in limited supply on our blue planet. Less than 1% of the world’s freshwater supply is available for human use in lakes, rivers, and groundwater (Sharma et al., in press. *Wetzel’s Limnology*). Global environmental degradation further increases the risk of water scarcity, deterioration in water resources, and declines in biodiversity (i.e., Woolway, Sharma, and Smol 2022. *Bioscience*). For example, climate change and human demand have decreased freshwater storage in 53% of lakes and reservoirs around the globe in the past three decades (Yao et al. 2023. *Science*). A combination of factors including warming temperatures, increased evaporation, alterations in precipitation patterns, and increased human consumption have contributed to a declining freshwater supply for over 2 billion people who live within these watersheds (Yao et al. 2023. *Science*). Concurrently, water quality in freshwater systems is deteriorating in response to global environmental degradation (Yang et al. 2022. *Geophysical Research Letters*). Algal blooms, which can have severe effects on environmental and human health, are becoming more widespread across the globe, in particular in Asia and Africa where freshwater demand is already high (Hou et al. 2022. *Nature Geoscience*). Continued climate change and global environmental degradation will even further exacerbate the water crisis. Mitigation, adaptation, the implementation of integrated water resource management, social and technological innovation, and education will be essential to reverse the water sustainability crisis.

The UNITAR Global Water Academy will empower policy and decision-makers, government officials, industry, and the communities most affected by water insecurity, with the knowledge, expertise, and capacity to ameliorate the water crisis. We aspire to foster training and capacity development, empower community-based networks, weave traditional knowledge, and inspire innovation to co-create sustainable water solutions and ensure equitable access to water for all.



Water insecurity for vulnerable communities

Water insecurity is inequitable around the world. Gender, racial, socioeconomic, and cultural inequalities are readily apparent in patterns of access to clean freshwater worldwide. Targets 6.1 and 6.2 of UN SDG 6 highlight the importance of equitable access to water and sanitation. The inequitable distribution of freshwater amplifies inequitable access to freshwater. Freshwater is distributed unequally on the planet and the majority of the available freshwater is found in northern regions (Verpoorter et al., 2014. *Geophysical Research Letters*; Messenger et al. 2016. *Nature Communications*), although the majority of people live within the Global South. The Global South is vulnerable to increased water scarcity, with fewer available freshwater resources and poorer water quality conditions. Pressures from high human demand, climatic changes, alterations in land use, population growth, and extractive processes, all contribute to the decline in freshwater availability and degradation of water quality



(Jenny et al. 2020. *Journal of Great Lakes Research*). Inadequate water and sanitation contribute up to 80% of illnesses in the developing world and approximately 3.5 million deaths annually. Women and girls, in addition to poor and marginalized groups, are disproportionately impacted by water insecurity. The UNITAR Global Water Academy will emphasize training, capacity building, research, and knowledge activities for the communities most affected by water insecurity.

Water scarcity affects vulnerable communities around the world, even in regions where freshwater is abundant. For example, Indigenous Peoples all over the world experience water insecurity and lack of access to clean drinking water. Indigenous territories that have been colonized have faced degradation due to resource exploitation and extractivism for capital interests, in addition to the adverse impacts caused by climate change. Indigenous stewardship practices have also been eroded by colonization. However, the ways of knowing and being that are contained within Indigenous philosophies and practices promote protection of the lands, waters, and all life on earth. Indigenous scholars and activists call for a reorientation in how humans think about water, shifting from resource to relation. That is, water is a relative that we have responsibilities toward, through stewardship, and with whom we engage in relations of reciprocity (Chiblow 2019. *Water*; McGregor 2010 in *Speaking for Ourselves: Environmental Justice in Canada*). The protection of relationships between Indigenous Peoples and water is very important. Indigenous Peoples have deep and profound connections to the earth that are based in their spirituality, and in natural law and teachings from the Ancestors. Projects that are “For us by us” with regard to Indigenous Nations are key to sustainable and transformation change and internal capacity building. Our initiative prioritizes “two-eyed seeing,” an approach that brings together Indigenous and western ways of knowing, understanding and responding to water issues and solutions to these problems (Bartlett, Marshall and Marshall, 2012).

Scope

The “UNITAR Global Water Academy” is proposed to be created as a multi-stakeholder collaboration between academic institutions and private sector partners, with York University (Canada) as Academic Lead. The three key pillars of the UNITAR Global Water Academy will tackle diverse aspects of the water sustainability crisis: training, research, and knowledge mobilization, ultimately used to inform decision-making and public policy. Specifically, the UNITAR Global Water Academy aims to:

1. Promote international knowledge transfer and capacity sharing among students, researchers, government, non-governmental organizations, industry, knowledge keepers, and community members.
2. Offer a hybrid way of learning that incorporates in person and online activities that will enable students to engage and collaborate across borders and disciplines.
3. Develop scientific-based and two-eyed water solutions that inform water policies and programs.
4. Measure and monitor impact and promote replicability of innovative and proven water management practices
5. Facilitate conversations and partnerships between researchers, government, non-governmental organizations, industry, and community members to enhance understanding of water issues.
6. Support equitable capacity building in sustainable water management, especially in distressed areas, for Indigenous communities and marginalized/equity-deserving groups.



Vision

The UNITAR Global Water Academy will foster training and capacity development, empower community-based networks, weave traditional knowledge, and co-create innovative sustainable water solutions to ensure equitable access to water for all.

The objective of the UNITAR Global Water Academy is to deliver a global virtual education training and capacity building platform on water. The Academy will build on our focus on social justice, diversity, and the public good to create a training program that is uniquely focused on disadvantaged communities.

We will provide training and develop skills on global water issues, generate risk assessments of water insecurity, and build strategies for resilience, mitigation, and adaptation measures in response to global environmental degradation, including climate change, to ultimately safeguard our water resources. Moreover, we will engage with global leaders, including in the private and public sectors, to develop effective and scalable water management practices and create a water culture based on just sustainability.

We will incorporate Indigenous perspectives and sustainable development principles into the UNITAR Global Water Academy from the outset. Uniquely, we will weave traditional Indigenous knowledge within our program to further our understanding of practices in caring for water. Our commitment to social justice and Decolonization, Equity, Diversity, and Inclusion (DEDI), is at the heart of all of our activities.

Potential Partners

The UNITAR Global Water Academy will be a highly collaborative international academy with partners across disciplines and institutions. A few of the identified key partners include:

Institutions: UN-Water; Global Water Partnership

Academic partners: Georgia Tech, United States; Nova School, Portugal; University of Victoria, Canada; and University of Philippines, Philippines

Commercial partners: AB InBev, Diageo, Danone, Heineken, Pernod Ricard

Key Performance Indicators and Goals for Year One

Within the first year, progress will be made within four pillars: operationalization and governance, training, research, and knowledge mobilization (Figure 1).

Operationally, the major goals will be to co-create the organizational and governance structure and build an engaged and active collaboration with academic partners. Building capacity and membership across academia, government, industry, and affected communities will be a central goal for knowledge mobilization. We will work closely with our international academic, industrial, and United Nations partners to build our network and launch the UNITAR Global Water Academy.

We will develop and launch the UNITAR Global Water Academy. We will plan curriculum with academic partners. The themes of courses that we will envision offering within the first year, simply based on our expertise at York University, include: i) Humanitarian Water Engineering; ii) Complexity and challenges of detecting and addressing contaminants of emerging concern; and iii) Perspectives and practices in caring for water through the lens of traditional Indigenous knowledge.



With respect to research, building interdisciplinary collaborations with academic and industrial partners will be an integral component of the first year. We can already envision a suite of interdisciplinary projects including: i) Understanding the responses of our freshwater supply to climatic changes; ii) Building an artificial intelligence-enabled flood forecasting tool; iii) Elucidating emerging contaminant trends within a climate change context; iv) Optimising water and wastewater treatment plants using data-driven methods; v) Building green technologies for wastewater, drinking water, and stormwater treatment; vi) Weaving traditional knowledge and Indigenous perspectives and practices for caring for water; vii) Storying water with music, media arts and performance; and viii) Understanding and improving water safety in humanitarian settings and in remote communities. Building diverse, collaborative, and international research teams will enable us to tackle these and other important research projects.

Figure 1. Summary of key performance indicators in Year One for the UNITAR Global Water Academy.

UNITAR Global Water Academy Goals for Year One

THEMES

- Humanitarian Water Engineering
- Complexity and challenges of detecting and addressing contaminants of emerging concern
- Perspectives and practices in caring for water through the lens of traditional Indigenous knowledge

Deliverables

Operations & Governance	Appoint Director & Associate Director Hire Coordinator Hire Indigenous Leader Co-create organizational and governance structure with partners
Knowledge Mobilization	Develop & launch website Press release about the launch of the UNITAR Global Water Academy Build capacity, partnerships, and membership across academia, government, industry, and communities. 2 Face-to-face meetings: North America & Europe
Training	Summer 2023: Launch UNITAR Global Water Academy with Panel on "Humanitarian responses to water insecurity in response to extreme climatic events" Host monthly panels within the three themes Host 3 courses: i) Humanitarian Water Engineering; ii) Complexity and challenges of detecting and addressing contaminants of emerging concern; and iii) Perspectives and practices in caring for water through the lens of traditional Indigenous knowledge. Plan curriculum with academic partners Develop and launch global training programme with several modules or courses launched over the next 12 months
Research	Build interdisciplinary collaborations with academic and industrial partners Develop scientific based water solutions that inform water policies and programmes Measure and monitor impact and promote replicability of water management practices Support capacity building for sustainable management of water especially in distressed areas and for Indigenous communities and marginalized groups



Water Expertise at York University

The lands and waters of the area where York University is located, also known as Tkaronto (Toronto) have been cared for by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat since time immemorial. The area is part of the Dish with One Spoon Covenant, an agreement between Indigenous Peoples to peaceably share and care for the Great Lakes region. The current treaty holders are the Mississaugas of the Credit First Nation and the British Crown (including its successor state Canada). York University recognizes the harmful impacts of Western colonization on Indigenous lands, waters and Nations. York University is working toward the protection of Indigenous and Treaty Rights, the implementation of the United Nations Declaration on the Rights of Indigenous Peoples and the implementation of the Truth and Reconciliation Calls to Action.

York University is a leading international teaching and research university with a large and diverse student body of approximately 55,000 students enrolled in our undergraduate and graduate programs at our Keele and Glendon campuses situated in Toronto, Ontario, Canada. Ontario is home to over 300,000 lakes and borders four Laurentian Great Lakes, which hold approximately 20% of the world's freshwater supply. Although freshwater is abundant and extensively studied, there continue to be marginalized communities, particularly remote and Indigenous communities, who do not have safe and easy access to clean water on their reserves within the province of Ontario. Marginalized communities around the world continue to lack access to clean water. Promoting social justice within and beyond our community remains a cornerstone of our university.

As an institution, we are committed to advancing our contributions to the United Nations Sustainability Development Goals across our research, teaching, and service activities. We are one of two universities in Canada and 25 worldwide who are part of the United Nations Institute for Training and Research's (UNITAR) global network of training centres for knowledge-sharing, training, and capacity-building for leaders, local authorities, and civil society. In July 2021, the United Nations Economic Commission for Europe (UNECE) established the Toronto Centre of Excellence on Youth Homelessness Prevention, the first Geneva UN Charter Centre of Excellence in North America at York University. We have a strong record of institutional support for water research across faculties. For example, we have supported the development of a water-focused Organized Research Unit (ORUs) called One WATER. Our Organized Research Units serve as synergistic hubs, supporting innovative, interdisciplinary and collaborative research taking place beyond traditional academic units. One WATER strives to understand and develop solutions to the ongoing water sustainability crises, attract and train future leaders in the field, educate the public on water issues in Canada and around the world, and build industrial partnerships to identify key problems and solutions for safe access to clean water.

We work at the forefront of fundamental, applied, community-based, and policy water related research. Within the policy and humanitarian sphere of water-related research, we recruited Dr. James Orbinski as the inaugural Director of York University's Dahdaleh Institute for Global Health Research. The Dahdaleh Institute for Global Health Research focuses on three main pillars: Planetary Health, Global Health and Humanitarianism, and Global Health Foresighting. The Dahdaleh Institute regards ecological integrity as a determinant of health worldwide, human activity as pushing ecological limits to a breaking point, and climate change as a fundamental threat to human life. They work with organizations within the humanitarian field to identify operational challenges and collaboratively build and implement innovative and practical solutions, including linkages between poor water quality and malnourished child health, and developing tools to provide clean water in refugee camps.

Within the applied field of water research, we provide extensive support to the Lassonde School of Engineering to build the capacity to develop solutions for all aspects of water research, including water, wastewater, stormwater, and groundwater resources. Particular strengths lie in water treatment and bioremediation, emerging contaminants, light-based technologies for water purification, flood forecasting, and water management in Arctic communities and in humanitarian settings. For example, we recruited Dr. Satinder Kaur Brar as the James and Joanne Love Chair in Environmental Engineering within the faculty of Civil Engineering. Dr. Brar is an international leader in the field of environmental engineering whose portfolio covers aspects of water security, sustainable groundwater sources, smart environmental technologies for renewable energy and climate change adaptation, green infrastructure, and environmental protection and sustainability.



York University is also committed to supporting fundamental water research across disciplines. For example, Dr. Sapna Sharma from the Department of Biology was awarded a Provostial Fellowship and a York Research Chair to further our understanding of the impacts of global environmental change on water quality and water availability in lakes around the world. Dr. Sharma founded the Aquatic Research Group at York University, a pan-university seminar and networking series, to build collaborations with students, faculty, and staff across the university. Moreover, Dr. Deborah McGregor (Anishinaabe), a professor within the Osgoode Hall Law School, Canada Research Chair in Indigenous Environmental Justice and Director of York's Center for Indigenous Knowledges and Languages, focuses on Indigenous knowledge systems to issues surrounding water and environmental governance, environmental justice, and sustainable development. Additionally, Dr. Ellie Perkins, a lead author for the 6th Assessment Report of the United Nations Intergovernmental Panel on Climate Change, addresses global inequities while advancing the energy transition, particularly considering water security.

A university with a strong track record in supporting interdisciplinary research, there are also numerous researchers with the arts and humanities who bring their methodologies and epistemologies to understanding water as a vital, storied presence, with diverse, and deeply impactful meanings in different cultures around the globe and throughout history. In the Faculty of Art, Performance, Media and Design, for example, media artist and Canada Research Chair Mary Bunch works closely with her co-creator, Anishinaabe philosopher Dolleen Tisawii'ashii Manning, to create media arts worlds that imagine water worlds that instantiate Anishinaabe ontology. In the department of music, Stephanie Martin's Composition *WATER: An Environmental Oratorio*, imagines a fantastical world, in which Water is personified, surrounded by singing spirits. These are just a few examples of individuals committed to promoting a world of clean water at York University, with a more comprehensive list of researchers working in this area along with their research interests available in Appendix 1. York University has mobilized an entire community working towards equitable access to clean freshwater in Canada and abroad. We have an engaged student, faculty, and staff body committed to understanding and developing scientific, technological, natural, health, and social solutions to water security in a changing climate.



Launch of the Online Platform

On March 22, 2024, we launched our online platform at globalwateracademy.org

This was a tremendous effort with the web design and web hosting spearheaded by UNITAR with intensive direct collaboration on content from a team at York University. On our platform, we summarize important details of the UGWA, host a repository of online training and publications, and provide a community forum to develop and engage a virtual community.

We provide a few snapshots of our website below.

The screenshot shows the homepage of the Global Water Academy website. At the top left is the 'water ACADEMY' logo. The navigation menu includes: HOME, ABOUT US, EVENTS, COMMUNITY FORUM, TRAINING, and CONTACT US. The main banner features a photograph of two people performing a dance move on a beach at sunset, with the text: 'World Water Day: Exploring Indigenous and Muslim Water Stories through the Arts' and a 'Know more' button. Below the banner are logos for UN Water Academy, UNITAR (United Nations Institute for Training and Research), and YORK U (York University). The 'Did you know?' section contains five statistics:

- 2.3 BILLION** PEOPLE LIVE IN COUNTRIES EXPERIENCING HIGH WATER STRESS ISSUES (UN-WATER, 2021).
- 3.2 BILLION** INDIVIDUALS ARE AFFECTED IN WATER-SCARCE AGRICULTURAL AREAS, WITH 1.2 BILLION IN SEVERELY CONSTRAINED REGIONS (FAO, 2020).
- 2.2 BILLION** LACK SAFE DRINKING WATER, AND 4.2 BILLION LACK SAFE SANITATION, REPORTED BY THE WORLD HEALTH ORGANIZATION AND THE UNITED NATIONS CHILDREN'S FUND (WHO/UNICEF 2023).
- 80 PERCENT** OF WASTEWATER FLOWS BACK INTO THE ECOSYSTEM WITHOUT BEING TREATED OR REUSED (UNESCO, 2017).
- 90 PERCENT** OF NATURAL DISASTERS ARE WEATHER-RELATED, INCLUDING FLOODS AND DROUGHTS (UNISDR, 2015).

Learn more about the need for learning on water sustainability crisis in our [About Us](#) section.

Selected highlights

Link to SDGs, how efforts to co-create innovative sustainable water solutions are linked to the achievement of the Agenda 2030.

Here's an overview of how SDG 6 (Clean Water and Sanitation) relates to the other Sustainable Development Goals (SDGs)
Click on each SDG

Click on each SDG



Start learning today

This platform gathers information on online course offered by UN entities.



More COURSES



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About The UGWA

Mission Statement

The **UNITAR Global Water Academy (UGWA)** empowers learners all over the world with the knowledge and skills to respond to the global water sustainability crisis by providing hybrid training and online courses developed by global leaders in water research, resource management, and policy development; developing scientific and two-eyed water solutions to water sustainability; and by building the capacity and international partnerships necessary to achieve the objectives of UN Sustainable Development Goal 6.

Upcoming Events



World Water Day: Exploring Indigenous and Muslim Water Stories through the Arts

Past Events



UNITAR at the SDG Summit

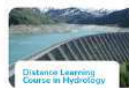


UGWA 1st Event on Humanitarian Response to Emergent Water Crisis



Launch of the UNITAR Global Water Academy

Online Courses



Engage with a network of experts in Water and Sanitation

UGWA Community Forum

Enrol

LOGIN

ENROL

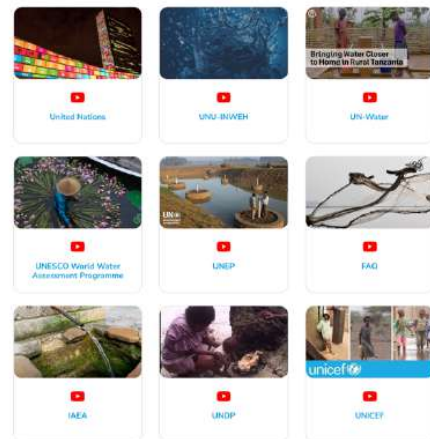


Publications

This section includes documents that could be useful for learning, such as courses, guidelines, information to learn through stories, blue technologies, works, stories or education events, explanation about the UN activities and academic journals/publications about a variety of the water sustainable goals.



Videos



Contact us



We are located at the Headquarters of the United Nations Institute of Training and Research in Geneva, Switzerland.

First Name Last Name

E-mail

Subject

Message

Key Partnerships Established

Within the first year, we forged many collaborations with institutions around the world. Our goals were to establish partnerships with institutions across a broad geographic range, including North America, Europe, Asia, and Australia. In the coming year, we hope to develop partnerships with institutions in South America and Africa. We have reached partnership agreements with 10 member institutions.



UNITAR

The United Nations Institute for Training and Research (UNITAR) provides innovative learning solutions to individuals, organizations, and institutions to enhance global decision-making and support country-level action for shaping a better future.

UNITAR's Vision:

The vision for which the Institute aims reflects a drive for results and programming to develop the capacities of individuals, institutions, and organizations with a view to overcoming global challenges.

UNITAR's Mission:

- Providing high-quality learning solutions to address the capacity development needs of individuals, organizations and institutions;
- Advising and supporting governments, the UN and other partners with knowledge services, including those that are technology-based;
- Facilitating knowledge and experience sharing through networked and innovative processes; and
- The vision for which the Institute aims reflects a drive for results and programming to develop the capacities of individuals, institutions and organizations with a view to overcoming global challenges. Integrating innovative strategies, approaches and methodologies into our learning and related knowledge products and services.



York University

The York University is a top international teaching and research university and a driving force for positive change. Located in Toronto, Canada, York is empowered by a welcoming and diverse community with a uniquely global perspective, and preparing their students for their long-term career and personal success. Together York is making things right for our communities, our planet, and our future.

York University's growing area of strength in water research, strong local and global relationships, and commitment to positive change has resulted in the University being named academic lead in UNITAR's Global Water Academy.



UNU-INWEH

United Nations University Institute for Water, Environment, and Health (UNU-INWEH) is one of the United Nations University (UNU) institutes, an academic arm of the UN. The University's 13 research and training institutes are located in 12 countries and address a range of global development challenges. UNU-INWEH specializes on water for development, working, primarily, with countries in the Global South, and addressing water issues of global significance. Water is the entry point to all UNU-INWEH's activities, including environment and health.

The Institute addresses primarily continental water resources challenges. UNU-INWEH works to bridge the gap between the wealth of evidence and research that exists on water resources, and the practical needs that political leaders and decision makers in low- and middle-income countries have. UNU-INWEH is linked to key processes in the UN system, and represents the entire UNU in UN-Water – a cross-agency group in the UN and international partners working on water and sanitation issues globally.

UNU-INWEH's research has a diverse range of partners and stakeholders, including politicians and policymakers in developing countries, concerned with water, health and environment issues; donors and implementing agencies from the North and the South; scientific community in water-related research institutions and academia; UN agencies and other international and regional organizations and networks; host country and national partners in Canada, media; and civil society. UNU-INWEH was established in 1996, as a public service agency and a subsidiary body of the UNU. Its operations are secured through long-term host-country and core-funding agreements with the Government of Canada. The Institute is located in Hamilton, Canada; its facilities are supported by McMaster University. UNU-INWEH is the only Institute in UNU that focuses entirely and solely on water issues. It is also the only entirely water-focused UN entity in Canada.



Nova SBE

Nova School of Business & Economics (Nova SBE) is a business school located in Portugal that offers a wide range of academic programs. Founded in 1978, the school has approximately 3,000 students from over 70 different countries. Nova SBE is a dynamic business and economics school. They are engaged in searching for highly-qualified professionals who thrive in a fast-paced institution.



University of Victoria

The University of Victoria (UVic) is one of Canada's leading research-intensive universities. We are located in Victoria, on the BC coast. At UVic, they combine three main elements: dynamic learning, vital impact, and their extraordinary academic environment. Together, these three elements nurture an environment of discovery innovation, and creativity.

This fortifies their work in sustainability and healthy societies. It shapes UVic's worldview with diverse perspectives, including those from Indigenous and international communities. It fuels their commitment to economic well-being, technological advances, and social justice.



University of Public Service

The University of Public Service (UPS; Nemzeti Közszołgálati Egyetem) is a higher educational institution in Budapest, Hungary. Established in 2012, it is one of the youngest universities in Central and Eastern Europe; however, its faculties as former independent colleges look back much earlier.

The university was officially founded on 1 January 2012 through the merger of the Zrínyi Miklós National Defence University (becoming the Faculty of Military Sciences and Officer Training), the Police College (becoming the Faculty of Law Enforcement) and the Faculty of Public Administration of Corvinus University of Budapest (becoming the Faculty of Public Administration at UPS). In addition to these faculties, UPS includes institutions that function as educational organs and think tanks and is initiating its fourth faculty of European and international studies.

The university's primary goal is to educate future public administration officials, military and law enforcement officers (through BA and MA programmes) and to develop the skills and know-how of current members of public service (through further training programmes). Moreover, UPS also functions as a think tank for public service (through PhD programmes, joint conferences, and individual research activities of lecturers).



NangTang Technological University

Nangtang Technological University (NTU, Singapore): A research-intensive public university has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Medicine, Humanities, Arts, & Social Sciences, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute and Energy Research Institute @ NTU (ERI@N). Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world's top universities, the University's main campus is also frequently listed among the world's most beautiful. Known for its sustainability, NTU has achieved 100% Green Mark Platinum certification for all its eligible building projects. Apart from its main campus, NTU also has a medical campus in Novena, Singapore's healthcare district.



Asian Institute of Technology

The Asian Institute of Technology (AIT) is an international English-speaking postgraduate institution, focusing on engineering, environment, and management studies. AIT's rigorous academic, research, and experiential outreach programs prepare graduates for professional success and leadership roles in Asia and beyond. Founded in 1959, AIT offers the opportunity to study at an institution in Asia which possesses a global reputation.

Going forward, AIT will be stressing its global connections, injection of innovation into research and teaching, its relevance to industry, and its nurturing of entrepreneurship, while continuing to fulfill its social impact and capacity building role. Sitting on a beautiful green campus located just north of Bangkok, Thailand, AIT operates as a multicultural community where a cosmopolitan approach to living and learning is the rule.

You will meet and study with people from all around the world. Today, AIT's internationally recognized engineering, environment, and management graduates are highly sought after by employers in their home country and elsewhere. Across many walks of life in Asia, AIT alumni have distinguished themselves as CEO's of private and state enterprises, as business owners, as well-respected researchers and faculty, and as senior university and government officials.



Global Water Partnership

The Global Water Partnership (GWP) is a global action network with over 3,000 Partner organisations in 180 countries. The network has 77 accredited Country Water Partnerships and 13 Regional Water Partnerships. The network is open to all organisations involved in water resources management: developed and developing country government institutions, agencies of the United Nations, bi- and multi-lateral development banks, professional associations, research institutions, non-governmental organisations, and the private sector.

GWP's action network provides knowledge and builds capacity to improve water management at all levels: global, regional, national and local. GWP does not operate alone. Its networking approach provides a mechanism for coordinated action and adds value to the work of many other key development partners in government, civil society, and the commercial sector to engage with each other to solve water problems.



The University of Newcastle Australia

The University of Newcastle Australia is a comprehensive university of and for our regions, we have delivered superior education and world-class research since 1965. We are based in the Hunter Valley and the Central Coast in New South Wales, and our purpose is to deliver an exceptional student experience, preparing graduates for life in an increasingly interconnected society.

We serve our regions by taking research that matters to the world and bringing our global expertise home. Recognising water is a basic component of human existence and the support system on which people, economies and ecosystems depend. Our academics study the importance of water to ecosystems and humans, its use and management as a resource and its modification through contamination and pollution. The University of Newcastle focuses on monitoring, understanding and dealing with the impacts of climate variability and change in the Asia-Pacific region.

The impacts on indigenous and developing communities in the region are a particular focus. We work with water authorities and universities in the region to achieve our goals in research and training.

The major water challenges we address are:

1. Managing the impacts of climate variability and change on the quality and quantity of water resources and water redistribution within rural, urban and natural landscapes;
2. Modelling, restoring and/or rehabilitating rivers and catchments.
3. The water and energy nexus, health and food security. Other areas of expertise include industrial water reuse, extreme event (flood, drought, bushfire) risk analysis, hydrological and stochastic modelling, and water resources management. We have identified that the broad priority areas for the global water industry are; improving service resilience, water efficiency, community engagement, climate change adaptation, decision making, safeguarding drinking water and environmental improvement.