



Background Information

What is the Holland Water Challenge?

The Holland Water Challenge (HWC) is a program that challenges local university students to learn about real-life water challenges and to develop their own ideas and solutions.

- Since 2010, more than 10 editions have been organised in Australia, Singapore, Myanmar, China and Indonesia.
- Each edition focusses on topics or projects that are key to the collaboration between the Netherlands and the host country. Topics may change from year-to-year.
- More than 350 students from over 30 universities have participated in the program.
- More than a thousand students have joined campus presentations.
- More than 40 companies and organisations have supported the HWC, both through funding and expertise (mentors).

Website: www.hollandwaterchallenge.com

Youtube: <https://www.youtube.com/channel/UCJu9GTAczczP9mvNiRUsXA>

Facebook: www.facebook.com/hollandwaterchallenge



[The winning team from ITB presented with their award by Minister Basuki and Minister Schultz]

Why the Holland Water Challenge?

There is a serious shortage of water professionals worldwide. Organisations – both public organisations and private companies - find it increasingly difficult to attract young employees. Young people often know little about the water sector and/or have the wrong impression: they don't know the companies, they don't understand the career opportunities, they don't think they can make a difference, they feel the work will be too difficult or technical, etc.

The main objective of the HWC is to interest more students to work in the water sector by:

- (1) Learning them about real-life water challenges their own country;
- (2) Letting them work together with experts from companies and organisations (mentors);
- (3) Giving them the opportunity to develop and present their own ideas and solutions.

In this way, the HWC is about education but even more about **inspiration**. We want students to **experience** how fantastic the opportunities are for them to help solve the world's water problems and build a career in the water sector.

Who is the HWC for?

Most participants of the HWC program are final year Bachelor, Master and PhD students who study in water-related disciplines, such as water resources management, hydraulic engineering, port engineering, hydrology, ocean engineering, etc.

However, depending on the theme of the HWC program, the partners of the program may decide to narrow or broaden the target group. Sometimes young professionals are included as well.

What do students learn?

The HWC is not a (formal) education program. Instead, the program focuses on students learning to apply their theoretical knowledge into practice:

- To learn and understand what the real-life water problems are in their own country and internationally;
- To learn how water organisations and companies develop (integrated) solutions for these problems, considering technical as well as economic, environmental and societal factors.
- To learn how actual projects are planned and executed, and, very importantly;
- To learn how they can develop their own (practical) ideas and solutions.

Companies in the water sector strongly feel these are critical learning requirements for students and young professionals to start their career.

Skills that are being developed throughout the HWC program include:

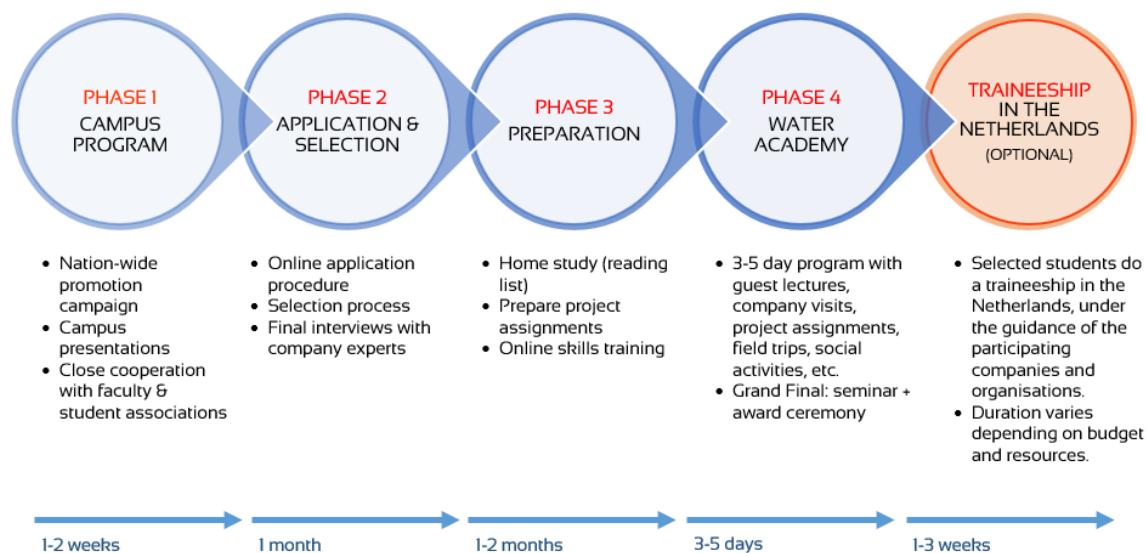
- Problem identification, analysis and definition
- Business planning, incl. internal/extern analysis (swot), development of solutions and alternatives, cost/benefit analysis, implementation/planning, etc.
- Team work
- Presentation (for a professional audience, in English)
- Business plan/proposal writing (in English)
- Negotiation
- Networking (with professionals)



[Australia 2015 winners Dan Peade and Paul Munro presenting and discussing their plan with experts from the Queensland Government and private sector]

What is the format of the HWC program?

The HWC program format typically has 4 phases as described below (see picture). Some program have a 5th phase consisting of a traineeship that allows a selected number of students to come to the Netherlands to do a special program, usually for 1-3 weeks – depending on the available budget.



Adding up the different activities, each HWC program runs for about 4 to 6 months (taking into account holidays and exam periods). The schedule is discussed with the universities/faculty beforehand to make sure students have enough time to participate.



[Company experts and students from Myanmar Maritime University working on a team assignment]

How much time do students need to spend?

Depending on exact format of the program – as discussed and agreed with the partners and universities beforehand – students are expected to spend approximately 60 hours on the program – which is about 3-4 hours average per week over a 4-month period.

Sometimes students receive credits for their participation. However, in most cases students invest their own time (extracurricular). Either way, the program is always discussed in detail with the universities and faculty to ensure their support and making sure the program does not conflict with other commitments (courses, exams, etc.).

If a traineeship or other type of project is offered to (selected) students – locally or in the Netherlands - more time will be needed.



[Students from Australia meeting with staff from the UNESCO-IHE Flood Resilience group as part of their three-week traineeship in the Netherlands]

What is the role of the professional partners?

Every HWC edition is supported by a group of companies and organisations, both from the Netherlands and the host country:

1. **Private Companies.** In each program 3 or 4 companies act as “lead partners” supporting the program with funding and providing staff expertise (average 6-8 staff days per edition).
2. **Dutch Government.** The Ministry of Infrastructure & the Environment and/or the local Embassies often support the HWC with funding (financially and in-kind) and advice.
3. **Local Government.** Local government partners support the HWC with funding (financially and in-kind) and advice. Depending on their interests, they may also provide expertise for the program or mentors for the students.
4. **Sponsors.** Additional companies and organisations may be providing support, financially or in-kind.

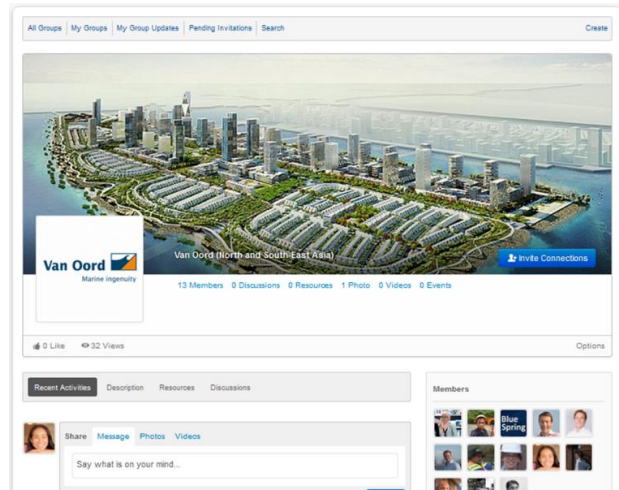
[Partners of the Indonesia-Netherlands Water Challenge 2013-2015]



How do students and professionals communicate?

The HWC is supported by an online platform, called BlueSpring. This platform has been specifically developed for HWC, giving both students and the professional experts (mentors) a secure online environment to communicate. The platform has possibilities for students to create their own personal profile, create groups for their teams, upload media (video, photos) and documents, ask questions to experts, join discussion boards, etc.

Because all students who have participated in the HWC since 2010 are on the same platform, BlueSpring is also becoming a powerful community of young water leaders from across Asia!



Who organises the HWC program?

The *Holland Water Challenge* is run by 2BGlobal, a private limited founded in the Netherlands with local representation in Singapore and Brisbane. 2BGlobal is a so-called social enterprise, delivering services in the interest of human and environmental well-being.

2BGlobal is 100% independent, allowing it to serve the interests of all different stakeholders - Dutch companies and government, local government agencies, universities, students, etc.

"The Singapore-Netherlands Water Challenge comes at an excellent time as we press forward in our efforts to address future challenges in watershed and delta management. It is my pleasure to express our support."

**Dr. Khoo Teng Chye, Executive Director
Singapore Centre for Liveable Cities**



Information about the HWC editions/programs

AUSTRALIA

www.hollandwaterchallenge.nl/australia

1st Edition - *Australia Living with Water*

2nd Edition – *Australia Water Smart*

3rd Edition – *Let's Talk Resilience!*

SINGAPORE

www.hollandwaterchallenge.nl/singapore

1st Edition – *Building with Nature*

2nd Edition – *Adaptive Solutions for Climate Change*

3rd Edition – *Urban Water Rebels*

INDONESIA

www.hollandwaterchallenge.nl/indonesia

1st Edition – *Coasts and Ports Indonesia: People, Planet & Profit*

MYANMAR

www.hollandwaterchallenge.nl/myanmar

1st Edition – *Smart Delta*

CHINA

www.hollandwaterchallenge.nl/china

1st Edition – *Holland Water Week @ World Expo Shanghai*

2nd Edition – *Aquatech*