



CRC for
Water Sensitive Cities



Program D: Adoption Pathways | Project D4.1 | Project duration: July 2013 – July 2016

Strengthening educational programs to foster future water sensitive cities leaders

Overview

The ambition of the CRC for Water Sensitive Cities (CRCWSC) is to play a critical and catalytic role in re-shaping how urban design and urban water are viewed and managed with respect to one another. This is necessarily a multi-scale agenda across different sectors and disciplines which will require the development of capacity in urban planning and water professionals from a wide range of government, utility, consulting and community bodies.

The project aims to develop a set of professionally targeted Master level modules, programs and short courses aimed at building the capacity of emerging urban leaders to stimulate and drive processes of innovation toward the realisation of water sensitive cities (WSC).



Key outcomes

This project will provide a pathway for translating CRCWSC's research insights and outcomes into transdisciplinary learning processes which build the relevant capacities of urban professionals to drive the implementation and delivery of innovations in urban water management, planning and design.

These learning processes will be delivered through new modules and programs within the mid-career professional Masters and post-graduate programs offered by the International WaterCentre (IWC) and UNESCO-IHE, and through targeted short courses that are based on those modules.



Insights into professional, problem-based learning for real world change

The project has redeveloped and delivered a module on urban water for IWC's professionally targeted Master of Integrated Water Management (MIWM) program. The module, called "Urban futures: delivering water sensitive cities", explores the drivers and challenges for urban water services and aims to help participants of the Masters program understand why a change and transition toward more water sensitive practices is needed, and how it can be facilitated.

The module promotes an interdisciplinary approach, examining the interplay between society, technology and urban design. Along with technical elements such as climate-responsive design, flood mitigation and waterway health, the module has a strong emphasis on socio-technical change. It investigates the "actors" — water

utilities, government organisations, the community — as well as possible mechanisms of transition to a WSC.

The Masters module is designed and delivered around practical, real world case study learning and integrates field visits and problem-based learning with specialist lectures, interactive workshops, in-depth discussions and exercises. The module is being delivered for the second time between July and November 2014 to a range of water professionals from countries including Australia, Bangladesh, Chile, China, Honduras, Indonesia, India, Indonesia, Japan, Laos, Mexico, Namibia, Sierra Leone, the United States of America and Vietnam.



Project design

Delivering WSC outcomes requires skills and knowledge in urban professionals to work across departmental, organisational and disciplinary boundaries in complex and innovative ways — what can be termed a T-shaped skills profile.

This project has been working to characterise the kinds of skills and knowledge required to deliver WSC outcomes by interviewing WSC project and program champions from across Australia, the Netherlands, Vietnam, the Philippines, Indonesia and China. The results of this work will feed directly into the product design and market assessment of WSC education and short course programs.

Outlook

Current postgraduate programs offered by IWC and UNESCO-IHE have a clear water focus and are intended for water professionals, but they appear to be of limited appeal to the broader urban planning and design market in their current form. This project will seek to determine if there is a sufficiently strong demand for an integrated

mix of water management, regional and urban planning and design skills to underpin a new Masters program to target planners, urban designers and water managers.

Outputs associated with the project will include:

- an assessment of the knowledge and skills needs of professionals from Australia, the Netherlands and a range of Asian cities in relation to their capacity for driving innovation toward water sensitive city outcomes, to be released by the end of 2014
- market research assessment of different education and short course topics delivered in different ways (accredited, non-accredited, online, face to face, half day to multi day) at different levels of cost and interactivity
- a standardised curriculum for a range of market tested, professionally targeted postgraduate Masters level modules and short courses, each with a set of teaching materials
- a syllabus for a new standalone Masters program or route within an existing program, comprising the new modules plus others as informed by the knowledge and skills needs assessment.

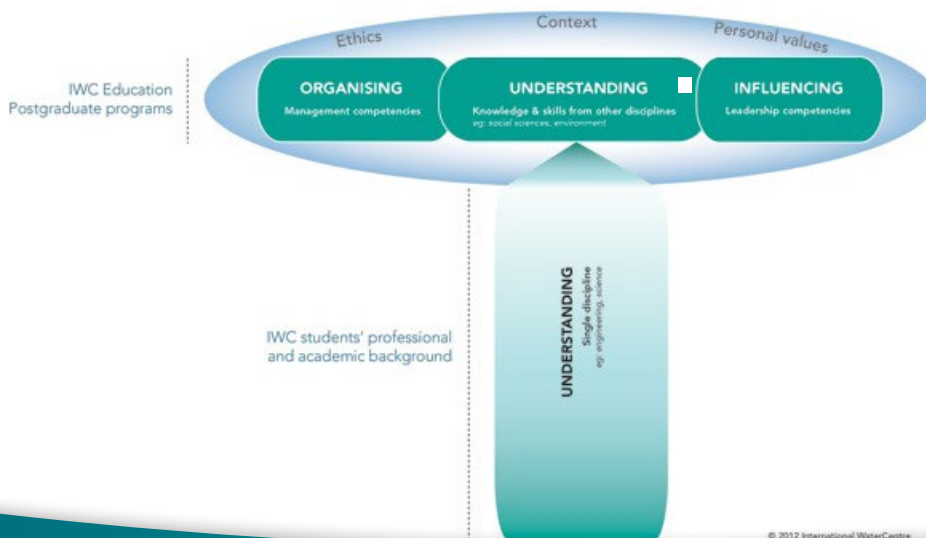


Figure 1. T-shaped skills profile of water professionals. ((c) IWC)

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About the Cooperative Research Centre for Water Sensitive Cities

The Cooperative Research Centre for Water Sensitive Cities (CRCWSC) brings together interdisciplinary research expertise and thought-leadership from Australia and the world to address current urban water management challenges facing our cities and regions. In collaboration with over 80 research, government and industry partners, it develops and synthesises knowledge into powerful tools and influences key players aiming to achieve sustainable, resilient and liveable water sensitive cities.

Further information

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