Masters | Graduate Diploma | Graduate Certificate

**Integrated Water Management**

Full-time or part-time/distance
Why study with IWC?

Water managers around the world are facing increasingly complex challenges. Successfully addressing these challenges will require them to collaborate and cross social, environmental and technological boundaries to provide sustainable solutions.

Integrated water management

The Master of Integrated Water Management (MIWM) is one of the few courses in the world that takes a truly transdisciplinary, integrated approach to water management in both developed and developing country contexts.

The MIWM is coordinated by the International WaterCentre (IWC) – a globally recognised leader in integrated water management education, training and applied research.

About IWC

IWC was founded in 2005 as a joint venture of four highly-ranked Australian universities: The University of Western Australia, The University of Queensland, Griffith University and Monash University. IWC’s international and national networks provide a breadth of expertise and experience rarely found in a single organisation.

Why study with IWC?

Graduates gain expertise to:

• Provide technical and managerial input into planning, design and operation of water supply, wastewater and resource infrastructure
• Understand the relative strengths and weaknesses of governance frameworks underpinning good water management
• Recognise and respond to the socio-economic factors impacting effective water solutions
• Design and implement strategies for collaboration in water management
• Help reduce poverty by promoting equitable and sustainable use of water

World-class universities

The University of Queensland, The University of Western Australia and Monash University are all ranked in the top 100 universities worldwide* and Griffith University is home to the Australian Rivers Institute, Australia’s largest group of university-based scientists specialising in river, catchment and coastal research and education.

*Source: QS World University Rankings 2014/15

A co-badged and co-taught degree

Enrol at The University of Queensland and upon graduation receive a degree certificate (testamur) stamped with the crests of IWC’s four founding member universities.

Custom-designed for water leaders

Gain the technical, managerial and leadership skills you need to advance your career in the water sector, and create innovative, whole-of-water-cycle solutions to global water challenges.

Collaborative teaching

Benefit from the expertise of highly regarded academics and industry practitioners. Lecturers are drawn from IWC’s founding universities across a wide range of disciplines to provide a transdisciplinary approach to water management.

Cultural and professional diversity

Build lifelong friendships and professional connections with fellow students from around the globe. IWC students come from very diverse backgrounds such as engineering, biology, chemistry, public health, hydrology, natural resource management and social sciences.

Practical learning experiences

Develop integrated skills for the real world through many problem-based learning projects, workshops, case studies, field trips and a final Masters project (professional placement or research project).

Flexible delivery options

Choose to exit the program at the Graduate Certificate, Graduate Diploma or Masters level. If you are a domestic* student, you can also choose between studying the program part-time (3 years) or full-time (1.5 years).

Dedicated support

IWC education team is committed to providing you with the personal support, academic advice and resources you need throughout your studies.

Ongoing networking

Join the IWC Alumni Network, a dynamic community of 700 water practitioners from 76 countries, as well as IWC’s extensive network of national and international contacts.

World-class universities

# TOP 100

*Domestic students are Australian and New Zealand citizens and Australian permanent residents.

What is integrated water management?

The integrated approach to water management:

• acknowledges the environmental, ecological and human processes that water undergoes from catchment to coast;
• clarifies and manages the multiple values of water; and
• considers the impacts of decisions systematically across environment, politics, law, science, culture, engineering, economics, health and society.

Integrated water management is a call for change and for leadership in the way we manage water.

FOUNDING MEMBERS:

IWC student on North Stradbroke Island

Program highlights

“*At IWC we believe tomorrow’s solutions lie in effective leadership, capacity building and integrated, whole-of-water cycle approaches to water management. We are united by a strong sense of community, multidisciplinary and ethical values, and a desire to build capacity to manage change in the water sector and beyond.”

MARK PASCOE
CEO, IWC

What is integrated water management?

The integrated approach to water cycle disciplines:

Cross-cutting water cycle disciplines

Culture
Engineering
Government
Finance
Economics
Education
Health
Science
Environment
Public Health
Governance
Politics

Water cycle elements and processes

Catchment processes
River restoration/ restoration
River management
Water supply
Wastewater management
Water sensitive urban design
Groundwater and hydrology
Water and industry
Receiving water quality
Water and climate change

Sustainable use of water

Economics

Reduce poverty

Poverty

Reduce inequality

Inequality

Promote sustained,

equitable economic
growth

Economic growth

Ensure availability and sustainable management of water for all

Water

*Domestic students are Australian and New Zealand citizens and Australian permanent residents.

Sustainable use of water

Economics

Reduce poverty

Poverty

Reduce inequality

Inequality

Promote sustained, equitable economic growth

Economic growth

Ensure availability and sustainable management of water for all

Water

*Domestic students are Australian and New Zealand citizens and Australian permanent residents.
The program commences in Semester 1 (February) each year. International students come to Australia to study the program full-time (1.5 years). Domestic* students can choose to study the program either full-time or part-time/distance (3 years). Exit points exist at the Graduate Certificate and Graduate Diploma levels.

**Program content**

**Program structure**

- **Foundation modules**
  - New perspectives on project management
  - Science of water
  - Water, sustainability and development
  - Water governance and policy

- **Integration modules & specialisation streams (choose one)**
  - Catchment and aquatic ecosystem health
  - Water planning and economics
  - Water supply, sanitation and hygiene (WASH)
  - Community, livelihoods, development and water (in Thailand)

- **Final project**
  - Professional placement or research project (in Australia or overseas)

**Graduate Certificate**

**Graduate Diploma**

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**Masters**

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<tr>
<td>Community, livelihoods, development and water (in Thailand)</td>
<td>Collaborative planning</td>
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**Specialisation streams**

At the end of Semester 1, students choose one of three specialisation streams.

1. **International development**
   - This stream develops the technical knowledge and community engagement skills you need to alleviate poverty and improve access to water and sanitation services in developing countries. You will work with communities to establish effective and sustainable water and sanitation services and gain the skills to implement behaviour change strategies for improved hygiene and sustainable livelihood strategies for overcoming poverty. You will learn about the strengths and weaknesses of alternative governance models for development and understand the financing mechanisms and institutional capacity required to ensure lasting impact.
   - In this stream you will undertake two specialist modules:
     - Community, livelihoods, development and water (in Thailand)
     - Water supply, sanitation and hygiene

2. **Urban water**
   - This stream develops the design, planning and engagement skills you need to play a significant role in transforming urban sustainability. You will explore a range of concepts, technologies and methods to better integrate water into urban planning and design, to improve aquatic ecosystem function in and around cities, to promote the use of a range of alternative water supplies and to enhance the liveability of urban places. You will also gain skills in water sensitive urban design and understand how waste streams can become resource streams, and how we can make our cities more resilient to climate change.
   - In this stream you will undertake two specialist modules:
     - Urban futures: delivering water sensitive cities
     - Urban metabolism: resource and energy recovery systems

3. **Water, land and people**
   - This stream develops the knowledge and skills you need to integrate assessment and planning of water resources with effective stakeholder engagement to promote sustainable water management. You will characterise and assess the trade-offs involved in allocating increasingly scarce water resources across competing uses, including urban areas, agriculture, industry and the environment. You will gain social and technical skills to reconcile tensions between competing interests, for example, farmers and miners, towns and cities or the environment and industry.
   - In this stream you will undertake two specialist modules:
     - Water and agricultural landscapes (in Perth)
     - Collaborative planning

**Delivery options**

- **Full-time (1.5 years)**
  - Available for: international and domestic* students
  - Study load: four modules per semester
  - Delivery mode: full-time students attend weekly lectures and tutorials delivered on-campus at The University of Queensland. They also attend off-campus field trips and workshops with part-time students.

- **Part-time/distance (3 years)**
  - Available for: domestic* students only
  - Study load: two modules per semester
  - Delivery mode: part-time/distance students attend a short residential period of field trips and workshops at the beginning of each semester. The rest of the content is taught online using the best principles of distance delivery.

*Domestic students are Australian and New Zealand citizens and Australian permanent residents.
Practical learning experiences

The program develops your critical thinking, problem-solving and leadership skills through many field trips, problem-based learning projects, case studies, workshops and a final project. By participating in these ‘hands-on’ experiences you will apply transdisciplinary solutions to specific water-related problems.

Field trip experience to North Stradbroke Island

One of the world’s largest sand islands becomes a classroom for the first three days of the program. MVC takes both full-time and part-time students to North Stradbroke Island, off the east coast of Australia. During this first field trip, students work in small multidisciplinary teams to identify significant water issues and explore their biophysical, social and political consequences.

Concepts of engineering, groundwater hydrology, aquatic ecology, planning, anthropology, law and economics are woven through discussions of integrated, sustainable water management in this beautiful island setting.

Problem-Based Learning (PBL) projects

The program includes four PBL projects, comprising roughly 50% of the total assessment weight for the coursework component of the program. PBLs can be tailored to fit into existing coursework, research or projects within your current workplace.

Foundation semester

- **PBL1 (group)** – Situation analysis and critique of an existing water management project or program
- **PBL2 (individual)** – Design of a project proposal to address a real-world water management issue from an IWM perspective

Integration semester

- **PBL3 (individual)** – Integrated catchment management: developing strategies for change
- **PBL4 (individual)** – Learning lessons from integrated water management in practice

Besides PBL projects, you will also participate in several workshops in Semesters 1 and 2, including a one-day Water Leadership Masterclass to strengthen your team leadership skills and a series of Integrated Water Management workshops.

Field trips

Full-time and part-time students participate in a number of field trips.

Current field trips* include:

- Three days on North Stradbroke Island
- 10 days in Gladstone, Queensland
- One-day Brisbane River field trip
- 10 days in Thailand if you choose ‘International development’
- 7 days in Perth if you choose ‘Water, land and people’
- Several half-day trips, looking at different sites and aspects of integrated water management, depending on your specialisation stream.

* Field trip details (including location) may change from year to year. Please refer to our website for up-to-date information regarding their location and associated costs: www.watercentre.org/iwm-field-trips

Final project

In your final semester (or last two semesters for part-time students), you will design and undertake self-directed project work to consolidate and apply integrated water management principles to a specific project, which can be:

- a project with a host organisation or community group (professional placement or collaborative project), or
- a project within your current workplace (tailored to your job), or
- a self-driven research project (field research or critical review)

Projects can be undertaken in Australia or overseas with water services, utilities, service providers, government agencies, consultancies, NGOs, academia and more.

You will receive guidance and support from WMC’s Project Coordinator who will assist you through the process of selecting a topic, host organisation and format that suit your personal or professional development aspirations. You will also be presented with a list of existing project opportunities with WMC partners.

The assessment takes the form of: a) a 14,000 word report, or b) a multimedia submission (audio, video, graphic design, phone app) with a 10,000 word report.

Visit IWC website for more information about the final project experience: www.watercentre.org/final-project

Examples of previous projects can be viewed at: www.watercentre.org/student-projects

Final projects to date have been conducted collaboratively with over 113 organisations worldwide...

... on topics covering a broad array of water-related issues:

Examples of previous projects can be viewed at:

www.watercentre.org/student-projects

Students visiting Mt Crosby Water Treatment Plant

Students on a field trip in Maroochy Catchment
Career opportunities and networking

As an IWC graduate, you will be able to advance your career in the water sector and apply for management positions in the public, private and non-government sectors. Graduates have found employment with NGOs, government and aid agencies, consultancies, water utilities, community development agencies, environmental regulators and agricultural, mining and industrial companies. Opportunities to continue onto a PhD also exist for students who achieve excellent academic results in their final project.

IWC recognises the importance of developing professional networks for career advancement and progression. As an IWC student, you will have access to IWC’s international and national water sector contacts. These contacts are often very valuable when looking for a suitable final project or employment opportunities. IWC will also provide you with an IWC Professional Development Grant (AUD 1000) which can be used towards your final project or professional development. Professional development opportunities include a range of functions, symposiums, conferences and other events where you will be able to expand your global network and learn about latest practices in integrated water management.

Career opportunities and networking

IWC Alumni Network (IWCAN)

On joining the program, you will become a member of the IWC Alumni Network, a global community of practice that promotes and supports integrated water management.

Membership benefits:

• Be part of a network of water professionals and organisations from around the globe, and keep in touch with your classmates and the IWC
• Access up-to-date integrated water management knowledge, including updated Masters curriculum, regular webinars and briefing papers from field practitioners and researchers
• Participate in networking events and workshops
• Receive the IWCAN monthly newsletter

Membership advantages:

• Be one of the first ever IWC Alumni*
• Receive IWCAN membership card and e-badge
• Be part of a community of practice that includes IWC Alumni* from all continents!

Members can benefit through:

• Access to the IWC Alumni Network (IWCAN)
• IWC Alumni Newsletter
• Access to Webinars and briefing papers
• Updates from the IWC Alumni Network
• Access to jobs and opportunities
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IWC Alumni Network includes:

• Access to family
• Access to friends
• Access to colleagues
• Access to contacts
• Access to events
• Access to workshops
• Access to members
• Access to alumni
• Access to network

IWC Alumni Network spans 170 partners and associates and 300 IWM Alumni* from 76 countries.

Countries shaded in light blue are countries where IWC students have come from since the program’s launch in 2008.

* The IWC Alumni Network has 700 members in total including 300 graduates and current students enrolled in Integrated Water Management (IWM) postgraduate programs and 400 graduates from IWC’s training courses.

“I really enjoyed the MIWM learning environment: lecturers have provided advice on how to actually solve real-world problems ourselves, rather than just imposing knowledge. I have learnt so much from my fellow classmates who have always been supportive and encouraging. Now I have good friends from all continents!”

HONG HANG NGUYEN (VIETNAM)
Monitoring and Evaluation Officer for Community Hygiene Aid Program, East Meets West Foundation, Vietnam

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As global water issues become more pressing, practitioners with a breadth of knowledge and skill sets will be needed to engage with the affected citizens, sectors and countries. I can think of no other program that provides such a holistic, internationally-applicable approach to confronting these issues.”

JEFF GOLDBERG (USA)
Water Program Advisor at USAID

Career opportunities and networking
Study in Brisbane

Enrol at The University of Queensland (UQ), ranked in the top 100 universities in the world, and enjoy all that Brisbane has to offer: a modern city, relaxed lifestyle and subtropical climate.

UQ’s St Lucia campus is renowned as one of Australia’s most beautiful campuses, just seven kilometres from Brisbane’s city centre. Bounded by the Brisbane River on three sides, the 114-hectare site provides a perfect study, research and living environment. You will enjoy the best of both worlds: a vibrant modern campus with the tradition of an established university.

IWC students have their own education space on campus. The teaching rooms, equipped with state-of-the-art technology, and a lounge area are provided for the exclusive use of IWC students.

Australia’s expertise in water management

Australia, the land of droughts and flooding rains, is an ideal location to study water management. The Australian water industry is globally respected for its knowledge and technical capability in a diverse range of water management practices.

5 reasons to study in Brisbane

1. Water management expertise and careers
2. World-class education
3. Sub-tropical climate and outdoor lifestyle
4. Safe and friendly city
5. Multi-cultural hub of creativity and invention

More information about The University of Queensland for international students, including the study environment, links to estimated living costs, refund policies, support services, information for students with families, and your legal rights as an international student can be found at: www.uq.edu.au/international-students

Entry requirements

- A completed undergraduate degree in a related field of study from an internationally-recognised institution
- English language skills as demonstrated by an officially recognised test of English language proficiency (refer to The University of Queensland’s specific requirements)
- Professional experience in a water-related field is preferred but not essential

Important dates

The program begins in Semester 1 (February) each year. There is no mid-year intake.

Closing dates for applications:
- International students: 30 November each year
- Domestic* students: 31 January each year

How to apply and costs

Please refer to www.watercentre.org/education/programs/costs for up-to-date tuition fees and how to apply. Tuition fees include the cost of most field trips plus a Professional Development Grant (AUD$1,000) to be used towards your final project or professional development.

Contact us

E: admin@watercentre.org
P: +61 7 3014 0200

Scholarships and financial aid

- Each year IWC offers several full scholarships. Applications are open from 1 May – 1 August for international students and from 1 July – 1 October for domestic* students. Partial scholarships are also available for part-time/distance or full-time study. watercentre.org/scholarships
- The Australia Awards program provides full scholarships for candidates in selected developing countries. australiaawards.gov.au
- FEE-HELP, a loan from the Commonwealth Government, is available to self-funded Australian students studyassist.gov.au
- Talk to your employer about accessing professional development funds to help cover the costs of attending the program. You may also have access to study leave.
- Other funding opportunities include international scholarships, loans and government-funded scholarships in your home country. watercentre.org/other-financial-aid

CRICOS codes

The University of Queensland (Education Provider: 00025B)
- Master of Integrated Water Management: 059263B
- Graduate Diploma in Integrated Water Management: 059261C
- Graduate Certificate in Integrated Water Management: 059262B

* Domestic students are Australian and New Zealand citizens and Australian permanent residents.
The International WaterCentre has partnered with the Global Water Partnership to provide scholarships for the Master of Integrated Water Management and the Cooperative Research Centre (CRC) for Water Sensitive Cities to design and deliver the “Urban water” specialisation stream.