



International WaterCentre

**Training and Capacity
Development Courses**

2024



International WaterCentre

The International WaterCentre (IWC) challenges the way people think about, act and tackle complex water problems. IWC recognises that water security is essential for life, and that we live in a rapidly changing world. We aspire for water ecosystems that are healthy and resilient, with sustainable economies and social justice, and in which people enjoy good health and wellbeing and can realise their desired quality of life.

The IWC brings together diverse expertise from leading water professionals around the world, to educate and empower individuals, communities and organisations, and to build their capacity to respond to water management challenges in innovative ways.

Griffith University

Griffith University is the home of the IWC. Since 1975, our teaching and research have been focused on addressing the most important social and environmental issues of our time. Today, that mission is as relevant as ever.

Social and environmental responsibility drive everything we do, from pioneering teaching in modern Asian studies and environmental science to our long-time support for First Peoples, social justice and sustainable practices.

Consistently ranking in the top 2 per cent of universities globally, our degrees are designed with industry in mind, the future in our sights, and social impact at heart.

With more than 55,000 students, our community spans five campuses across South East Queensland plus our Digital campus, complemented by a global alumni network of over 200,000 graduates.

We know the world can, and should, be a better place—for everyone. And in helping thousands of different people create a brighter future for themselves, we're doing our part to create a brighter future for all.



What IWC works on

We believe that integrated water management (IWM) approaches are necessary to achieving positive, coordinated and sustainable development of water for people, environments and economies. Integrated water management places a strong emphasis on collaboration between all stakeholders and takes a whole-systems approach to water management.

Being process focused, integrated water management is concerned with stimulating and managing change in the water sector, and in other sectors where water plays an important role.

IWC works within the following thematic areas of water management:

Water Leadership



IWC believes there is a need to build capacity in water professionals to become skilled in stimulating and driving processes of change in a variety of contexts. Different aspects of water management must be integrated systemically to effectively realise social, economic and environmental benefits whilst avoiding damaging trade-offs and impacts. This is a key focus of concern globally and central to the agenda of the SDGs, but for such ambitions to be realized, professionals require strong leadership capabilities to drive change. ([Link to Water Leadership courses](#))

Water Resilient Communities and Catchments



IWC works to support professionals and organisations to guide and build pathways of change that enable resilience to various water-induced natural and social pressures, such as floods and catchment activities. Given the connectivity of water across different populations, we work with both urban and regional communities and the catchments in which communities are embedded. ([Link to Water Resilient Communities and Catchment courses](#))

Climate Resilient WASH (Water supply, Sanitation and Hygiene)



IWC supports the achievement of SDG6, safe water, sanitation and hygiene for all and the flow-on benefits this brings to health, poverty alleviation, educational achievement, and economic growth. ([Link to WASH courses](#))

Integrated Water Management (IWM) Governance



IWC advocates for the application of Integrated Water Management principles and practices to water governance systems, which are the means to achieving the end goal of water security. We believe this encourages decision-making processes and commitments that consider whole social systems, and that enable productive participation in governance. ([Link to IWM, Governance courses](#))

Course and program types



Introductory courses

No prior knowledge needed. Provides an introduction to the topic.



Advanced courses

Recommended that participants have some prior knowledge and experience of this topic.



Programs

Longer and more in-depth learning.

Delivery modes



Online asynchronous

Self-paced, including guided discussions and optional live tutorials.



Online blended

A mixture of self-paced and online live sessions.



Face to face workshops

Delivered in person as one day to one-week workshops.



Blended courses

A mixture of online and face to face components.

Course brochures

The following sections provide one-page descriptions of the courses that will be offered by IWC in 2024, including dates, mode of delivery and costs.

Unfortunately, we are unable to offer scholarships for online training. However, course discounts may be available for groups, IWC postgraduate and WLP alumni, and participants from lower income countries. Please refer to individual brochures or contact IWC_training@griffith.edu.au for more information.

IWC are also able to develop and deliver custom designed courses for specific groups or organisations. Please contact the IWC training team if you wish to explore further options (IWC_training@griffith.edu.au)

*This brochure was produced in March 2024.
Information was accurate at the time of printing.
Please note that details are subject to change
without notice.*



Water Leadership



The flagship Water Leadership Program begins in December each year, with applications closing at the end of October. We will also be offering the six-week online Team Leadership for Emerging Water Leaders plus a choice of one-day workshops, or four-week online courses on the topics of “Leading with Courage and Compassion” and “Leadership to address complex challenges in the water sector”.

Courses Available in 2024

Select the links below to go to the one-page descriptions for each of these courses.

Water Leadership Program
10 month blended course



Team Leadership for Emerging Water Leaders

6 week Online asynchronous course



Leading with Courage and Compassion

1 day workshop in Brisbane



Leading with Courage and Compassion

4 week online blended course



Leadership to address complex challenges in the water sector

1 day workshop in Brisbane



Leadership to address complex challenges in the water sector

4 week online blended course



Water Resilient Communities and Catchments



In 2024 we will be offering a course on Soil Description, Classification and Mapping, and also a course on Introduction to Applied Soil Science. Both courses are delivered as hybrid online and face to face, with 2 weeks of online sessions, followed by a three day intensive in Brisbane, and then another two weeks of online sessions.

Another option is to enrol in a post-graduate micro-credentialled course – 7304ESC Soils and Geomorphology in Catchment Science. Students who successfully complete this course will be awarded a [Digital Badge](#) from Credly, and the course can be credited toward a postgraduate qualification at Griffith University.

Courses Available in 2024

Select the links below to go to the one-page descriptions for each of these courses.

**Soil Description,
Classification and Mapping**

**5 week blended online and
face to face**



**Introduction to Applied
Soil Science**

**5 week blended online and
face to face**



**7304ESC Soils and
Geomorphology in Catchment
Science**

**Griffith University Postgraduate
single course of study**



Climate Resilient WASH (Water, Sanitation and Hygiene)



We will be offering an online introductory course covering the fundamental principles and approaches to more usefully engage and support efforts to work towards achieving SDG6 in the WASH sector.

Another option is to enrol in a post-graduate micro-credentialled course at Griffith University – 7941ESC WASH: Water Supply, Sanitation and Hygiene. Students who successfully complete this course will be awarded a [Digital Badge](#) from Credly, and the course can be credited toward a postgraduate qualification at Griffith University

Courses Available in 2024

Select the links below to go to the one-page descriptions for each of these courses.

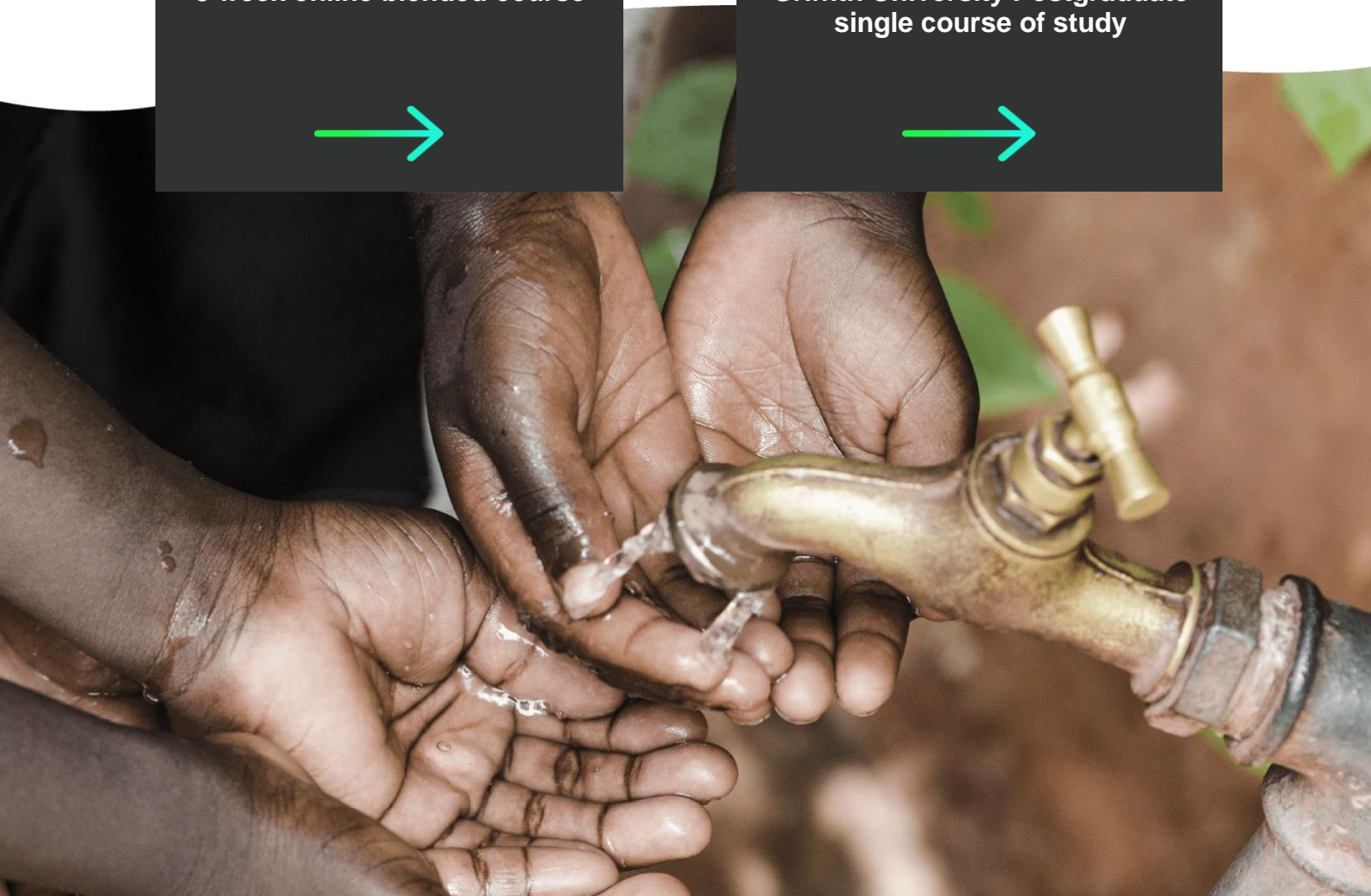
**Introduction to WASH for
Development**

8 week online blended course



**7941ESC WASH: Water Supply,
Sanitation and Hygiene**

**Griffith University Postgraduate
single course of study**



Integrated Water Management (IWM), Governance



We will be offering two online introductory courses on Integrated Water Management and Water Reform and Governance

Another option is to enrol in a post-graduate micro-credentialled course at Griffith University – 7921ESC Economics for Water Resource Management. Students who successfully complete this course will be awarded a [Digital Badge](#) from Credly, and the course can be credited toward a postgraduate qualification at Griffith University.

Courses Available in 2024

Select the links below to go to the one-page descriptions for each of these courses.

Introduction to Integrated Water Management

4 week online asynchronous course



Water Reform and Governance

6 week online asynchronous course



7921ESC Economics for Water Resource Management

Griffith University Postgraduate single course of study





Water Leadership Program

The IWC Water Leadership Program (WLP) is an award-winning, annual program that helps emerging leaders to develop the ability to exert influence, drive change and advance challenging integrated water management projects – abilities associated with the most effective integrated water management leaders.

The IWC Water Leadership Program is a feedback-intensive, 10-month professional development program that includes mentoring activities, one to one coaching sessions with specialist leadership coaches, face-to-face and online delivery modes, the use of individual leadership development plans, and the use of leadership focussed case studies from the water sector.

Learning objectives

- To help emerging water leaders typically at the project leader to middle management level to be more effective at exercising influence, driving positive change and advancing more sustainable and integrated forms of water management.
- To help participants to build self-leadership skills (e.g. self-awareness, confidence and a leader identity) as a pre-requisite for effective leadership and accelerated leadership development.
- To identify specific leadership development needs for each participant and to help them build personalised leadership development plans which include activities to be conducted in the workplace.
- To strengthen leadership abilities (e.g. skills, knowledge, networks and power) known to be associated with effective leaders.

Key topics

Topics include:

- Self-leadership (e.g. clarifying one's purpose and values, building emotional intelligence and resilience, improving time management etc.).
- Learning how to play important leadership roles in the water sector.
- Situational leadership.
- Team leadership.
- Strategic leadership.
- Ethical leadership, authentic leadership and servant leadership.
- Exploring leadership case studies.
- Communication skills for leaders.
- Building forms of personal and position power.
- Social networking.

Course requirements:

We estimate that full commitment to this program requires around 14 days of time over 10 months, including attending a 3 day face-to-face intensive in Feb/March.

Who should enrol?

This program targets non-executive leaders in the water and catchment management sectors. Participants play a variety of leadership roles, but are typically team leaders.

Benefits to your employer:

The program helps emerging leaders to initiate and drive change; implement integrated and sustainable water management practices; lead high performing teams; exercise influence across boundaries; build and use social networks; anticipate, plan for and use windows of opportunities to drive change; and use various influence strategies.

Facilitator:

Dr André Taylor,
Leadership Specialist,
International WaterCentre.

Bio:
<https://www.linkedin.com/in/andre-taylor-leadership/>



Commencing date

01/12/2024



Open to:

Domestic participants



Location:

Blended delivery –
Brisbane and online



Duration:

10 months part-time



Delivery mode:

Regular online live
sessions plus 2 face-to-
face intensives



Fees:

AUD \$10,500 + GST

- *Group discounts for organisations with 3 or more participants*
- *Scholarships [available](#)*

Register now:

<https://www.griffith.edu.au/engage/professional-learning/water-leadership-program>

Applications close 31st October 2024



Outcomes:

Participants who successfully complete the course will receive a Griffith University digitally badged micro-credential.



IWC – AWA Young Water Professionals Team Leadership Online Training Course

The International Water Centre (IWC) and the Australian Water Association (AWA) recognise the pressing need to build leadership capacity in young and emerging water sector leaders to advance more integrated and sustainable forms of water management.

During this six-week course, water leadership and management experts Dr André Taylor and Peter Wegener will introduce participants to key leadership concepts to build their capability to lead teams (e.g. teams of staff or project teams).

Course outline and objectives

This course aims to provide water professionals with a modular, online training course to build understanding, skills and confidence in the following areas:

- Building the capacity of new team leaders through understanding key leadership methods and principles.
- Awareness of the methods and principles of leadership development that new team leaders need to apply to their own development.
- An understanding of, and the ability to apply the fundamentals of, self-leadership which is the foundation of all other forms of leadership.
- The ability to apply fundamental team leadership concepts and tools to common team leadership challenges.
- Awareness of, and the capacity to apply the keys to successful team leadership, including leading virtual teams, and teams that need to be led without much authority (e.g. cross-boundary project teams).
- The ability to build a simple leadership development plan to guide one's development.
- The capacity to reflect on the content of the course to identify team leadership-related strengths, weaknesses and specific opportunities to improve.



Commencing date

3 June 2024



Open to:

Australian and International water professionals



Location:

Online



Duration:

6 weeks



Delivery mode:

Online asynchronous with optional live discussion each week



Fees:

AWA members \$500 + GST
Non-AWA members \$600 + GST

- 10% group discounts for organisations with 3 or more participants (Contact IWC_training@griffith.edu.au)

More Information:

<https://www.griffith.edu.au/engage/professional-learning/awa-team-leadership>

Register now:

<https://app.secure.griffith.edu.au/griffithpay/iwc-awa-team-leadership-course.html>



Outcomes:

Participants who successfully complete the course receive a Griffith University digitally badged micro-credential.

Course requirements:

Approximately 2-4 hours per week will be required to study materials and participate in online classes.

This course is typically delivered twice per year. For future dates, please contact IWC_training@griffith.edu.au

Who should enrol?

This online course is for water professionals who lead project teams or teams of staff, either currently or in the near future, especially newly appointed team leaders.

Benefits to your employer:

This course will help participants to effectively lead teams within your organisation. It will provide them with an understanding of how to lead teams in a variety of face to face and online settings.

Facilitator:

Peter Wegener
Senior Project Manager,
International WaterCentre

[linkedin.com/in/peter-wegener-australia/](https://www.linkedin.com/in/peter-wegener-australia/)



Leading with Courage and Compassion in the Water Sector

Delivery mode: 1 Day face-to-face workshop in Brisbane

As water professionals we're taught to think with our logical, rational brain and to tap into evidence from data and information.

What happens when you're promoted to lead people? Or you need buy-in from people to progress your project? They're not as straight forward as report writing, analysing data or modelling software.

Leading and influencing people in the water sector requires more finesse than old transactional dealings, and the command and control management style to successfully engage with your team and stakeholders.

Thankfully this finesse can be taught; it's not some elusive 'soft skill'. This finesse includes greater emotional intelligence, namely courage and compassion, as a water leader. These qualities enable a leader to build influence, loyalty and collaborative relationships so they can lead an engaged and effective team and create a strategic network.

Learning Objectives

- To understand the role of, and identify opportunities for, compassion and courage in relationship building and transformational leadership.
- To explore and discuss the neuroscience insights and psychology foundations underpinning the importance of compassion and courage to improve influence, collaboration, levels of trust, and loyalty within a team or network.
- To learn how to apply new emotional intelligence skills, concepts and tools through interactive activities, examples and a case study.

Key topics

- Introduction to the course.
- Introduction to emotional intelligence skills.
- Why courage and compassion are important in relationships and Leadership.
- Relevant skills and abilities needed to build these qualities.
- Neuroscience insights of the head, heart and gut brain, to enable reflection on relationships with others and owning personal behaviour and mindset.
- Discussing a case study in the water sector.
- Key points and additional learning resources.



Commencing date

Tuesday 23 July 2024
9am to 5pm AEST Brisbane



Open to:

Australian based water practitioners



Location:

The Ship Inn,
Southbank, Brisbane



Duration:

1 day (9am to 5pm)



Delivery mode:

1 day interactive workshop



Fees:

AUD \$750 + GST
(Includes catering)

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Masters courses).

Register now:

<https://app.secure.griffith.edu.au/griffithpay/leading-with-courage-and-compassion-in-the-water-sector-in-person.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential.

Course requirements:

There are no prerequisites. Allow an additional 2 hours for pre-workshop activities.

Who should enrol?

This course has been designed for emerging and current water leaders who are struggling to establish and maintain sustainable relationships. These leaders need to improve their emotional intelligence so they can cultivate collaborative, engaged teams and networks based on mutual respect and trust.

Benefits to your employer:

This course enables water leaders to develop a high standard of professionalism and personal engagement with their team and key stakeholders. With highly engaged teams comes higher productivity and lower turnover in a competitive market. Sustainable relationships lead to less stress and repeat business.

Facilitator:

Belinda Chapman, Leadership Coach and Trainer, Working Wheel Coaching and Facilitation, International WaterCentre. Bio: <https://www.linkedin.com/in/belinda-chapman-coaching/>



Leading with Courage and Compassion in the Water Sector

Delivery mode: Online course over 4 weeks

As water professionals we're taught to think with our logical, rational brain and to tap into evidence from data and information.

What happens when you're promoted to lead people? Or you need buy-in from people to progress your project? They're not as straight forward as report writing, analysing data or modelling software.

Leading and influencing people in the water sector requires more finesse than old transactional dealings, and the command and control management style to successfully engage with your team and stakeholders.

Thankfully this finesse can be taught; it's not some elusive 'soft skill'. This finesse includes greater emotional intelligence, namely courage and compassion, as a water leader. These qualities enable a leader to build influence, loyalty and collaborative relationships so they can lead an engaged and effective team and create a strategic network.

Learning Objectives

- To understand the role of, and identify opportunities for, compassion and courage in relationship building and transformational leadership.
- To explore and discuss the neuroscience insights and psychology foundations underpinning the importance of compassion and courage to improve influence, collaboration, levels of trust, and loyalty within a team or network.
- To learn how to apply new emotional intelligence skills, concepts and tools through interactive activities, examples and a case study.

Key topics

- Introduction to the course.
- Introduction to emotional intelligence skills.
- Why courage and compassion are important in relationships and Leadership.
- Relevant skills and abilities needed to build these qualities.
- Neuroscience insights of the head, heart and gut brain, to enable reflection on relationships with others and owning personal behaviour and mindset.
- Discussing a case study in the water sector.
- Key points and additional learning resources.



Commencing date

Wed 16th Oct 2024



Open to:

Australian based water practitioners



Location:

Online live workshops



Duration:

4 weeks. 4 x 2 hour workshops on 16/10, 23/10, 30/10, 6/11 2024, 12:30-2:30pm (AEST)



Delivery mode:

4 x 2 hour live interactive workshops



Fees:

AUD \$650 + GST

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Postgraduate courses).
- 20% discount for participants from low-income countries

Register now:

<https://app.secure.griffith.edu.au/griffithpay/leading-with-courage-and-compassion-in-the-water-sector-online.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential.

Course requirements:

There are no prerequisites. Allow an additional 2 hours for pre-workshop activities.

Who should enrol?

This course has been designed for emerging and current water leaders who are struggling to establish and maintain sustainable relationships. These leaders need to improve their emotional intelligence so they can cultivate collaborative, engaged teams and networks based on mutual respect and trust.

Benefits to your employer:

This course enables water leaders to develop a high standard of professionalism and personal engagement with their team and key stakeholders. With highly engaged teams comes higher productivity and lower turnover in a competitive market. Sustainable relationships lead to less stress and repeat business.

Facilitator:

Belinda Chapman, Leadership Coach and Trainer, Working Wheel Coaching and Facilitation, International WaterCentre. Bio: <https://www.linkedin.com/in/belinda-chapman-coaching/>

Leadership to Address Complex Challenges in the Water Sector

Delivery mode: 1 Day face-to-face workshop in Brisbane

Complex challenges (or 'wicked problems') are common in the water sector and are particularly difficult to address. They are typically associated with a high degree of uncertainty, conflicting views from stakeholders, dynamic systems and the need for behavioural change. To lead in this context requires leaders with the ability to accurately identify complex challenges, and adopt radically different leadership mindsets, styles and tools (e.g. 'adaptive leadership') compared to those we use for complicated technical challenges. This course will help water leaders to build this capacity and consequently boost their effectiveness at addressing seemingly intractable complex challenges to drive positive change.

Learning objectives

- To understand the nature of complex challenges in the water sector.
- To be able to distinguish between complex, complicated (technical), chaotic and clear challenges.
- To explore and discuss the leadership mindset, styles, skills and tools that are needed to address complex challenges.
- To learn how to apply new concepts and tools through interactive activities, discussions, examples and a case study.
- To prompt reflection on how participants can improve their leadership practice to address complex challenges.

Key topics

- Introduction to the course.
- The nature of complex challenges.
- Using the Cynefin framework to accurately distinguish between complex challenges and those that are complicated, chaotic or clear.
- The leader's mindset to address complex challenges.
- Suitable leadership styles and key behaviours (including adaptive leadership).
- Relevant skills and abilities.
- Discussing a case study of adaptive leadership in the water sector.
- Key points and additional learning resources.

Course requirements:

There are no prerequisites. Allow an additional 2 hours for pre-workshop activities.

Who should enrol?

This course has been designed for water professionals who want to drive positive change and to build their confidence, knowledge and skills to address complex challenges. These problems are associated with a high degree of uncertainty, conflicting views, and solutions are not immediately obvious.

Benefits to your employer:

This course will help water leaders to more confidently and effectively address the most difficult challenges that exist in the water sector. This capacity is typically needed to meet the strategic goals of organisations in the water sector (e.g. to improve river basin management and build water sensitive cities).

Facilitator:

Dr André Taylor,
Leadership Specialist,
International WaterCentre.

Bio:
<https://www.linkedin.com/in/andre-taylor-leadership/>



Commencing date

15th Oct 2024
9am to 5pm Brisbane



Open to:

Australian based water practitioners



Location:

Ship Inn, Southbank
Brisbane



Duration:

1 day (9am to 5pm)



Delivery mode:

1 day interactive workshop



Fees:

AUD \$750 + GST
(includes catering)

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or postgraduate courses).

Register now:

<https://app.secure.griffith.edu.au/griffithpay/leadership-to-address-complex-challenges-in-the-water-sector-in-person.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential

Leadership to Address Complex Challenges in the Water Sector

Delivery mode: Online course over 4 weeks

Complex challenges (or 'wicked problems') are common in the water sector and are particularly difficult to address. They are typically associated with a high degree of uncertainty, conflicting views from stakeholders, dynamic systems and the need for behavioural change. To lead in this context requires leaders with the ability to accurately identify complex challenges, and adopt radically different leadership mindsets, styles and tools (e.g. 'adaptive leadership') compared to those we use for complicated technical challenges. This course will help water leaders to build this capacity and consequently boost their effectiveness at addressing seemingly intractable complex challenges to drive positive change.

Learning objectives

- To understand the nature of complex challenges in the water sector.
- To be able to distinguish between complex, complicated (technical), chaotic and clear challenges.
- To explore and discuss the leadership mindset, styles, skills and tools that are needed to address complex challenges.
- To learn how to apply new concepts and tools through interactive activities, discussions, examples and a case study.
- To prompt reflection on how participants can improve their leadership practice to address complex challenges.

Key topics

- Introduction to the course.
- The nature of complex challenges.
- Using the Cynefin framework to accurately distinguish between complex challenges and those that are complicated, chaotic or clear.
- The leader's mindset to address complex challenges.
- Suitable leadership styles and key behaviours (including adaptive leadership).
- Relevant skills and abilities.
- Discussing a case study of adaptive leadership in the water sector.
- Key points and additional learning resources.

Course requirements:

There are no prerequisites. Allow an additional 2 hours for pre-workshop activities.

Who should enrol?

This course has been designed for water professionals who want to drive positive change and to build their confidence, knowledge and skills to address complex challenges. These problems are associated with a high degree of uncertainty, conflicting views, and solutions are not immediately obvious.

Benefits to your employer:

This course will help water leaders to more confidently and effectively address the most difficult challenges that exist in the water sector. This capacity is typically needed to meet the strategic goals of organisations in the water sector (e.g. to improve river basin management and build water sensitive cities).

Facilitator:

Dr André Taylor,
Leadership Specialist,
International WaterCentre.

Bio:
<https://www.linkedin.com/in/andre-taylor-leadership/>



Commencing date

12th Nov 2024



Open to:

Australian and international water practitioners who can participate in live online delivery



Location:

Online live workshops via Zoom



Duration:

4 weeks. 4 x 90 minute workshops on 12/11, 19/11, 26/11, 3/12 2024, 1- 2:30pm AEDT



Delivery mode:

4 x 90 min live interactive workshops via Zoom



Fees:

AUD \$650 + GST

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Postgraduate courses).
- 20% discount for participants from low-income countries

Register now:

<https://app.secure.griffith.edu.au/griffithpay/leadership-to-address-complex-challenges-in-the-water-sector-online.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential



Soil Description, Classification & Mapping



Commencing date

Mon 29th April 2024



Open to:

Australian based participants



Location:

Online live workshops / Griffith University Nathan Campus



Duration:

5 x 2 hr on-line sessions plus 3 day intensive from Thur 16/5 to Sat 18/5



Delivery mode:

Hybrid online and face to face. 5 x 2 hr on-line sessions, plus self-paced activities; 3 days face to face including 2 field trips



Fees:

AUD \$1,500 + GST (includes catering)

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or postgraduate courses).

Register Now:

<https://app.secure.griffith.edu.au/griffithpay/soil-description-classification-and-mapping-hybrid-online-and-in-person.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential

Delivery mode: 5 weeks online; inc 3 day workshop and field trips

Soil and soil materials are central to landscape function and to land management decisions, but soils are complex and are often enigmatic to managers. They are therefore open to misrepresentation and inappropriate management. So, comprehensive, scientific methods of describing soils, identifying soil types and classifying them have been developed over time to aid understanding their variety, their management properties, and where to find them.

This course will provide you with an understanding of methods to describe soil profiles and sections, how to go about classifying them to the Australian Soil Classification, and how to approach a survey and assessment of soils in the field and produce a soil map.

You will be introduced to the concepts of generic soil classification and 'local', mapping classification for soil map legends; soil map scale, sampling intensity and mapping methods to produce reliable soil maps for technical and legislative approval.

Learning objectives

- To educate and inform current and future professionals to aid wise decision-making by understanding different soil types and how to describe them.
- To cover the fundamentals of soil profile description and classification and aid participants' abilities to classify soil to the Australian Soil Classification system,
- Deeper understanding and interpreting of soil maps and legends, and how to go about a soil mapping survey.
- Familiarise participants with the process of planning, preparing and conducting a soil mapping survey.
- Show how these practical skills apply to the practice of landscape and catchment management and planning for EIS and approvals.

Key topics

- Describing the soil profile and sections according to the 'Yellow Book'¹
- Generic soil types and classification systems. The Australian Soil Classification system. Local, mapping classification of soil units.
- Identifying soil types in the landscape. The catena model and indicators.
- Mapping soil units – simple and complex.
- Mapping planning and preparation: survey types; scale and sampling intensity according to the 'Blue Book'²
- Mapping planning and preparation: preliminary map units; DEMS; imagery
- Field sampling and mapping

¹ Australian Soil and Land Survey Field Handbook; ² Guidelines for Surveying Soil and Land Resources

Course requirements:

There are no prerequisites, although this course accompanies the 'Introduction to Applied Soil Science' short course.

Participants attend 3 online sessions from 29/4/24 to 10/5/25, then a three day intensive in Brisbane from 16/5 to 18/5, then 2 online sessions from 20/5 to 29/5

Who should enrol?

This course is for those who want to gain a basic understanding of soils and soil science in a generic sense but also with a focus on Australian soil environments. It is relevant for ecologists, geotechnical engineers, environmental scientists / managers, land planners, catchment management, environmental management, early career professionals looking for professional development; job seekers/career changers; international research and coursework students.

Benefits to your employer:

This course will help land managers, planners, and resource industry land specialists and environmental consultants more confidently and effectively assess soils in the field, to apply the Australian Classification System, and to plan and undertake soil survey and mapping projects successfully.

Facilitator:

Dr Robin Thwaites, CPSS Senior Research Fellow CMRC/IWC, Griffith University

35 years experience in tertiary level teaching and as a public and private sector practitioner in pedology, soil survey, soil landscape analysis, and land evaluation.

Bio: [linkedin.com/in/robin-thwaites](https://www.linkedin.com/in/robin-thwaites)

Introduction to Applied Soil Science

Delivery mode: 5 weeks online; inc 3-day workshop and field trips

Soil and soil materials are critical to plant and crop productivity and as a service to the ecosystem. They are central to landscape function and to land management decisions, but soils are often little understood and therefore open to misunderstanding and mismanagement: they can be modified to improve and sustain productivity, or stability, but they also can be easily disturbed, eroded, and otherwise degraded.

This course will provide you with an understanding of the basic science underpinning soil processes, function, and use, and the application of this knowledge to catchment and land management and planning.

You will be introduced to the concepts of soil as a system – as an earth material as well as a plant-growth medium. You will also be introduced to the role of soil in the carbon cycle – specifically that of storing carbon in the overall management of CO₂ emissions.

Learning objectives

- To educate and inform current and future professionals to aid wise decision-making with regard to soils and soil landscapes
- To cover the fundamentals of soil morphology and soil processes, and biophysical soil systems in both natural and productive land-use contexts, understanding and interpreting soil analysis and soil maps, and how these practical skills apply to the practice of landscape and catchment management and planning.
- To identify the most important soil types with respect to their abundance and occurrence, productivity, and vulnerability to degradation, and how management activities should be tailored to meet the specific requirements of each.

Key topics

- The nature of soil and soil materials? The soil system
- Soil development factors and the main pedological processes
- Soil types and their distinctive factors – both generic and specific
- Understanding problem soil types: dispersive soils; acid sulphate soils; shrink-swell clays
- How to interpret soils in the landscape
- How soils are used and how we evaluate them (land capability)
- Introduction to soil carbon: the carbon cycle and storing carbon
- How certain soils are managed and mismanaged.



Commencing date

Mon 3rd June 2024



Open to:

Australian based participants



Location:

Online live workshops / Griffith University Nathan



Duration:

5 x 2 hr on-line sessions plus 3 day intensive from Mon 17/6 to Wed 19/6



Delivery mode:

Hybrid online and face to face. 5 x 2 hr on-line sessions; plus 3 days face to face including 2 field trips



Fees:

AUD \$1,500 + GST (includes catering)

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or postgraduate courses).

Register Now:

<https://app.secure.griffith.edu.au/griffithpay/Introduction-to-Applied-Soil-Science-Hybrid-online-and-in-person.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential

Course requirements:

There are no prerequisites. Participants will need to attend the entire one-week intensive in Brisbane.

Who should enrol?

This course is for those who want to gain a basic understanding of soils and soil science in a generic sense but also with a focus on Australian soil environments. It is relevant for ecologists, geotechnical engineers, environmental scientists / managers, land planners, catchment management, environmental management, early career professionals looking for professional development; job seekers/career changers; international research and coursework students.

Benefits to your employer:

This course will help land managers, planners, and resource industry land specialists and environmental consultants more confidently and effectively address the increasing soil and land management and planning requirements and challenges facing the land and environmental sector.

Facilitator:

Dr Robin Thwaites, CPSS Senior Research Fellow CMRC/IWC, Griffith University

Principal Environmental Scientist, AARC Environmental Solutions

Bio: [linkedin.com/in/robin-thwaites](https://www.linkedin.com/in/robin-thwaites)



Soils and Geomorphology in Catchment Science (7304ESC)

In this course we will explore the role of deep time as a control on catchment evolution and how this is manifest in contemporary catchment processes at differing scales. You will be introduced to the concepts of the sediment budget and the major erosion, transport and sedimentation process zones within catchments and how they respond differently to direct and indirect catchment disturbances in space and over time.

This is a micro-credentialed postgraduate course that be taken as a stand-alone course. However, it can also be used as credit for a postgraduate qualification in the Master of Catchment Science.

Learning Objectives

- Identify and describe the key geomorphic processes and process zones within any catchment;
- Understand sediment flux through a catchment, and explain how this might influence the construction of sediment budget models;
- Explain how 'long-term' geologic controls interact with 'medium and shorter-term geomorphic controls to drive 'contemporary' river and catchment processes;
- Recognise the major soil groups and their characteristics within the catchment landscape;
- Characterise the variability in channel types and key geomorphic process zones within a catchment;
- Demonstrate how erosion and deposition occurs within a catchment.

Key topics

- Key soil groups and their characteristics
- Weathering and soil formation
- Soil degradation
- Fluvial geomorphology and hydrology
- Field trips to Toohey Forest and Oxley Creek – soil description, stream description, soil and hill slope geomorphology

Course requirements:

Prospective students should apply via the Griffith University single course of study webpage at <https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>

For assistance, contact IWC training@griffith.edu.au

Who should enrol?

- People working in the NRM industry who want to update their skills.
- Consultants looking to undertake post-graduate studies in Catchment Science but who are unable to commit to a full post-graduate program.

Benefits to your employer:

Learn skills that can be applied in a range of natural resource management applications including hillslope soil erosion management; river channel erosion management; soil carbon accounting.

Facilitator:

Assoc Prof Andrew Brooks
Griffith University Coastal and Marine Research Centre

<https://experts.griffith.edu.au/7089-andrew-brooks>

<https://tinyurl.com/3cmb5hbn>



Commencing date

15/07/2024



Open to:

Domestic students



Location:

Online plus 3 day field trip in Sept



Duration:

Trimester 2 2024 (15th July to 28th Oct)



Delivery mode:

Weekly online classes and a 3 day field trip in September



Fees:

AUD \$3938
(indicative fees only)

Register now:

<https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>

Further information can be found at:

<https://www.griffith.edu.au/study/courses/soils-and-geomorphology-in-catchment-science-7304ESC#trimester-2-online>



Outcomes:

Participants who successfully complete the course will receive a Griffith University digitally badged micro-credential. The course can be used as credit toward a postgraduate qualification at Griffith University

Introduction to WASH for Development

Inadequate water, sanitation and hygiene (WASH) services impact on the health, livelihoods and wellbeing of many families around the world. The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP, 2021) indicates that 2 billion people did not use safely managed drinking water in 2020, while 3.6 billion people lacked safely managed sanitation and 2.3 billion people did not have access at home to a handwashing facility with soap and water.

The United Nation's Sustainable Development Goal 6 (SDG6) - to ensure availability and sustainable management of water and sanitation for all - underscores the importance of improving WASH, and the impact that will have on achieving a healthy and sustainable world.

Course outline

This online course will provide those starting their career or preparing for project work in the WASH sector with the fundamental principles and approaches to better engage with and support efforts to work towards achieving SDG6.

Participants are introduced to the core issues and concepts supporting sustainable and equitable use of safely managed water and sanitation services, and to improve hygiene behaviours. In addition, this course offers participants the opportunity to engage with a diverse group of individuals coming from different contexts and bringing different perspectives and experiences in relation to WASH.

Key topics

- Fundamentals of WASH and the Impacts of Inadequate WASH
- WASH a key dimension of environmental health
- Sanitation – safely managing human waste
- Water supply to meet personal needs
- WASH service delivery
- WASH and water resource management
- WASH and climate change
- Behaviour change in WASH
- The next decade in WASH

Course requirements:

Online discussions will be held during daylight hours AEST.

Approximately 4 hours per week will be required to study materials and participate in online discussions.

Who should enrol?

The course caters to those planning to work in, or supporting work on WASH in low resource environments (e.g. low and middle-income countries, marginalised populations). It is ideal for professionals in civil society or non-government organisations; government agencies; international development donor agencies; or consulting companies.

Benefits to your employer:

Organisations benefit from having staff participate in this course as it builds their capacity to effectively support WASH programs. Participants will also be introduced to a global group of participants, for peer-to-peer learning, as well as future network building.

Facilitator:

Peter Wegener, Senior Project Manager, International WaterCentre

Bio: <https://www.linkedin.com/in/peter-wegener-australia>



Commencing date

Mon 23rd Sept 2024



Open to:

Australian and international



Location:

Online



Duration:

8 weeks



Delivery mode:

Online self-paced with live discussion each week



Fees:

AUD \$750 + GST

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Postgraduate courses).
- 20% discount for participants from low-income countries

Register now:

<https://app.secure.griffith.edu.au/griffithhpay/introduction-to-wash-for-development.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential.

WASH: Water supply, sanitation and hygiene (7941ESC)

Sustainable Development Goal 6 articulates a global commitment to ensuring sustainable access to safe water, sanitation and hygiene practices for all people (targets 6.1 and 6.2). It also emphasises the interconnectedness of WASH with all aspects of integrated water management, such as catchment management, water use, protection of ecosystems, and community participation in water governance. This course provides participants with an understanding of social, environmental, financial and technical principles and approaches to meeting the water supply, sanitation and hygiene needs of underserved people.

This is a micro-credentialed postgraduate course that be taken as a stand-alone course. However, it can also be used as credit for a postgraduate qualification.

Learning Objectives

- Demonstrate understanding of the wide range of health and wellbeing issues related to water, sanitation and hygiene
- Explain the inequalities that presently exist in access and use of WASH
- Demonstrate understanding of fundamental principles, including whole-of-system and multidisciplinary principles underlying the development of appropriate, sustainable WASH services in low-resource contexts
- Demonstrate understanding of the elements of sanitation service chains
- Discuss the need for and fundamental principles involved in establishing a hygiene behaviour change program
- Demonstrate understanding of the water service chain and service delivery models, from community management through to pro-poor utility services
- Strengthen practical knowledge of engaging with stakeholders and communities to deliver WASH programs

Key topics

- Introduction to WASH and its intersects with resilience, climate change, gender and social inclusion, and other sectors
- WASH, health and wellbeing
- Key concepts in WASH in practice
- Community WASH and environmental health interventions
- WASH behaviour change
- Sanitation principles and approaches
- Dry and wet sanitation
- Sanitation supply and service models
- Water sources and managing water quality
- Water distribution and demand management

Course requirements:

Prospective students should apply via the Griffith University single course of study webpage at <https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>
For assistance, contact IWC_training@griffith.edu.au

Who should enrol?

Students / professionals with a background in environmental science, engineering, economics, or environmental health, and with an interest to play a role in improving WASH outcomes for all, in marginalised populations in low-middle income, as well as developed economies.

Benefits to your employer:

Develop the knowledge and skills of staff to play an active role in developing WASH policies, designing WASH programs, managing the delivery of WASH programs, and assessing WASH outcomes.

Lecturers:

Dr Regina Souter
Director, International WaterCentre
<https://experts.griffith.edu.au/9236-regina-souter>
Ass Prof Cara Beal
Cities research Institute, Griffith University
<https://experts.griffith.edu.au/7842-cara-beal>



Commencing date

15/07/2024



Open to:

Domestic and international students



Location:

Online



Duration:

Trimester 2 2024 (15th July to 28th Oct)



Delivery mode:

Weekly online classes



Fees:

AUD \$3,938
(indicative fees only)

Register now:

<https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>

Further information can be found at:

<https://www.griffith.edu.au/study/courses/wash-water-supply-sanitation-and-hygiene-7941ESC#trimester-2-online>



Outcomes:

Participants who successfully complete the course will receive a Griffith University digitally badged micro-credential. The course can be used as credit toward a postgraduate qualification at Griffith University

Introduction to Integrated Water Management



Commencing date

Mon 5th Aug 2024



Open to:

Australian and international participants



Location:

Online



Duration:

4 weeks



Delivery mode:

Online asynchronous with optional live discussion each week



Fees:

AUD \$650 + GST

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Postgraduate courses).
- 20% discount for participants from low-income countries

Register now:

<https://app.secure.griffith.edu.au/griffithpay/introduction-to-integrated-water-management.html>



Outcomes:

Participants who successfully complete the course will achieve a Griffith University digitally badged micro-credential.

We live in challenging times. Globally, fresh water is an abundant resource, yet there are still hundreds of millions of people worldwide who do not have access to a safely managed clean drinking water source and sanitation facilities. Demand from agriculture, manufacturing, electricity generation and domestic use will continue to grow, making fresh water one of the most contested resources on the planet. At the same time our climate systems are changing with drought and flood becoming more common and severe. How can we continue to secure reliable, good quality and affordable supplies of water and adapt our water systems to be climate resilient without degrading the ecosystems in which we are embedded and on which we rely?

Course outline

This course will provide you with an introduction to the history, theory and principles of Integrated Water Management (IWM) and will investigate the conceptual frameworks and practices used to critically analyse water management problems and identify sustainable solutions.

The course will demonstrate the relevance of context-specific interventions and stakeholder participation as being essential to IWM in practice. A diverse range of practitioner led case studies will also allow you to develop an applied knowledge of IWM.

In addition, this course offers participants the opportunity to engage with a diverse group of individuals coming from different contexts and bringing different perspectives and experiences in relation to water management.

Key topics

The online course covers:

- IWM history, principles and practices
- IWM in Governance and Policy
- IWM in Strategic Planning
- IWM in Urban (re)Development

Course requirements:

Online classes will be held during daylight hours AEST.

Approximately 4 hours per week will be required to study materials and participate in online classes.

Who should enrol?

This online course is for those wanting to gain a foundational understanding of IWM. It will benefit anyone involved in water management, including professionals from local or state government, utilities, consulting firms, NRM groups, researchers, and students.

Benefits to your employer:

Participants will gain knowledge in:

- IWM theory and practice
- How IWM can deliver multiple benefits to the environment, communities, and organisations
- Critical analysis skills and frameworks to address complex water management problems.

Facilitator:

Peter Wegener,
Senior Project Manager,
International WaterCentre

Bio:
<https://www.linkedin.com/in/peter-wegener-australia>

More information:

 watercentre.org

 IWC_training@griffith.edu.au



Water Reform and Governance

Water is a life stream for productive economies and is critical at every scale – from safe access at the household level, to mitigating conflicts across country boundaries. Management of water is considered a ‘wicked’ problem, one that is characterised by complexity, connectedness and conflict, and multiple perspectives. When regions neglect to manage water, it has negative economic, social, cultural and environmental consequences.

What are some examples of shortcomings in water governance and their consequences? How have governments learnt from past failures and can we identify principles that can inform better governance decisions? How can we better engage across sectors to ensure ownership and support for reforms?

Course outline

In this online course, we will explore these questions and draw on practical examples to demonstrate how water reform processes are successful when they are context driven, inclusive of direct and indirect users of water, take a whole-of-water-cycle approach to reform, and deeply consider multiple societal outcomes. The course concludes with a look at the limits of current reform processes and explores what else we, as water professionals, should be considering.

Key topics

The online course covers:

- the history of shortcomings in water governance
- water reform and OECD principles
- Australian and international water reform and governance models
- mechanisms, incentives and drivers of reforms in Australia
- common key successes of reform processes
- an exploration into how these lessons carry across different country contexts
- directions and possible drivers of future reforms

Course requirements:

Approximately 4 hours per week will be required to study materials and participate in online classes.

Who should enrol?

This course is for those who want to gain an understanding of water governance and drivers for reform. It would benefit practitioners, policy makers, decision makers, students, utility directors and employees of water associations, who want to understand how water reform intersects with integrated water management at local, regional, state and national levels.

Benefits to your employer:

This course is for those wanting to understand and influence water reform and governance models through collaborative understanding and information sharing. Bringing this perspective into the workplace will assist with better positioning the organisation and its activities in the water reform process.

Facilitator:

Dr Frederick Bouckaert, Research Fellow International WaterCentre

<https://www.linkedin.com/in/frederick-bouckaert/>



Commencing date

Mon 14th Oct 2024



Open to:

Australian and International water professionals



Location:

Online



Duration:

6 weeks



Delivery mode:

Online asynchronous with optional live discussion each week



Fees:

AUD \$750 + GST

- 10% group discounts for organisations with 3 or more participants
- 20% discount for IWC alumni (Water Leadership Program or Postgraduate courses).
- 20% discount for participants from low-income countries

Register now:

<https://app.secure.griffith.edu.au/griffithpay/water-reform-and-governance.html>



Outcomes:

Participants who successfully complete the course may achieve a Griffith University digitally badged micro-credential.

Economics for water resource management (7921ESC)

This course introduces economic theory and principles relevant to water resource management. Sustainable water resource management is described with reference to scale, equity and efficiency criteria. An economic conceptualisation of value will be developed by looking at markets as a mechanism for allocating scarce resources. Conditions under which markets fail to allocate water resources efficiently will be examined and this will form the basis for designing appropriate economic methodologies and tools to allocate water resources amongst competing uses. The course will examine real-world situations such as urban water supply, water in agriculture, water and health, and water in environmental uses.

This is a micro-credentialed postgraduate course that be taken as a stand-alone course. However, it can also be used as credit for a postgraduate qualification.

Learning Objectives

- Describe the concepts of ecosystem services, total economic value and sustainable water resource management from an economic perspective.
- Use sketch diagrams to explain how the behaviour of net benefit maximising consumers can be used to establish marginal willingness to pay.
- Define and describe the causes of market failure and explain how these market failures typically lead to inefficient allocation of water resources.
- Describe and apply tools to correct market failures in managing water resources and compare the tools in terms of efficiency and dependability.
- Use analytical and/or conceptual frameworks to appraise and critique environment-related policies relating to water resource management.
- Interpret results from relevant market and non-market based methods to estimate the economic value of water in environmental uses.
- Explain how DALY-based metrics are used to inform the setting of health targets.
- Apply appropriate methods to estimate the value of water as a factor input to agricultural and/or industrial production.

Key topics

- Water as an economic resource
- Value and markets
- Market failure
- Economic tools for efficient water resource management
- Water in urban use
- Water benefits to environment and human health
- Decision support tools

Course requirements:

Prospective students should apply via the Griffith University single course of study webpage at <https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>

For assistance, contact IWC_training@griffith.edu.au

Who should enrol?

Suitable for professionals working in water resource policy, planning or management; water and wastewater service delivery planning; natural resource or catchment management in government, utilities, consulting firms or not for profits who are looking to better understand and be able to employ economic tools to inform decision making.

Benefits to your employer:

Develop the knowledge and skills of staff to be able to design, deliver and interpret economic analyses of policy, plan or project options to maximise economic, environmental and social benefits whilst minimising costs.

Facilitator:

Ass Prof Jim Smart
School of Env and Sc,
Griffith University

<https://experts.griffith.edu.au/7210-jim-smart>



Commencing date

15/07/2024



Open to:

Domestic and international students



Location:

Online



Duration:

Trimester 2 2024 (15th July to 28th Oct)



Delivery mode:

Weekly online classes



Fees:

AUD \$3,938
(indicative fees only)

Register now:

<https://www.griffith.edu.au/apply/admission-pathways/single-course-of-study>

Further information can be found at:

<https://www.griffith.edu.au/study/courses/economics-for-water-resource-management-7921ESC#trimester-2-online>



Outcomes:

Participants who successfully complete the course will receive a Griffith University digitally badged micro-credential. The course can be used as credit toward a postgraduate qualification at Griffith University



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Australia

www.watercentre.org

The International WaterCentre and Griffith University acknowledge the people who are the traditional custodians of the land, pays respect to the Elders, past and present, and extends that respect to other Aboriginal and Torres Strait Islander peoples.

