

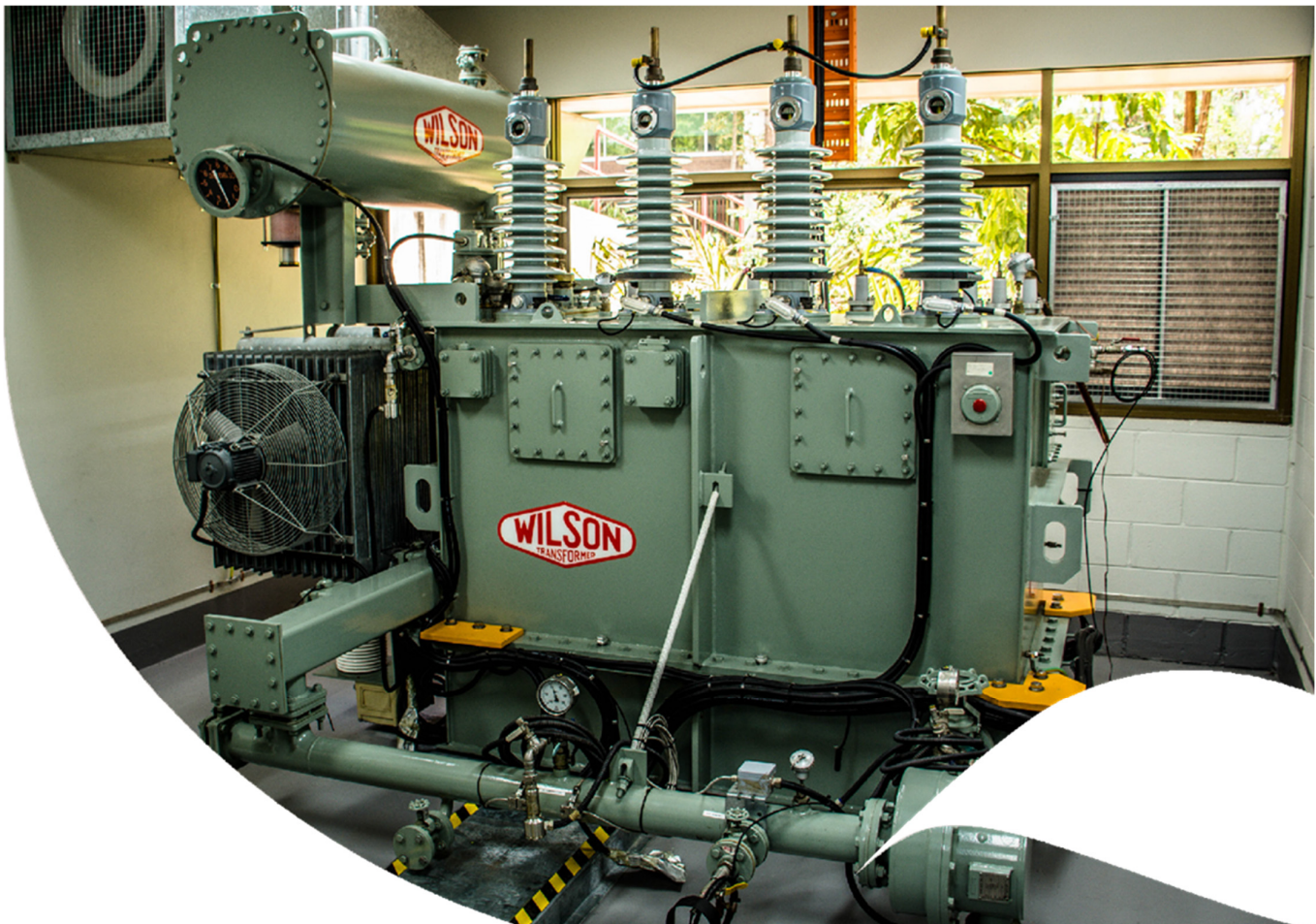
Power Transformer Tap Changers- Design, Maintenance and Testing

CPD Course, 20-21 July 2023

The University of Queensland's Australasian Transformer Innovation Centre (TIC) is pleased to announce a two-day face-to-face CPD course in Brisbane and focusing on Power Transformer Tap Changers- Design, Maintenance and Testing.

This tap changer course will deliver the theoretical

background information necessary along with "hands on" practical experience to understand the issues of tap changes faced by modern power systems and their operators. This course is aimed at procurement, asset strategies, operations and maintenance managers and engineers in generation, transmission and distribution, renewables manufacturing mining industrial and infrastructure organizations.



This two-day face-to-face course will bring industry professionals together for dialogue and sharing of knowledge to better understand the operation of tap changers, as well as the design, maintenance and testing thereof.

Key outcomes

- Understand the basic principles of tap changers, including oil and vacuum.
- Learn the basic arrangement of regulating windings, benefits and issues of oil and vacuum diverters.
- Become familiar with OLTC maintenance for oil and vacuum types.
- Be informed of innovative condition assessment of tap-changers using acoustic measurements, signal processing techniques used and results from field trials, case study.
- Be exposed to how some utilities are implementing life cycle-oriented maintenance of tap changers.

Presenters

- The presenters in this course will include industry experts from:
- Manufacturers of tap changers, including Reinhausen.
 - Transmission and distribution companies including Energy Queensland.
 - Service and testing equipment companies including Omicron.
 - Researchers from University of Queensland.
 - Oil and associated services companies such as Molekulis and TJH2b Analytical Services

Who should attend?

- Procurement, Asset Strategists, maintenance managers and engineers.
- Generation, transmission, and distribution personnel.
- Consultants, designers and operations staff in the renewables, manufacturing, mining, industrial and infrastructure groups.
- Young engineers just starting out in their career in Power.

Practical component

The course will have a half-day practical component at the end of Day 2, giving attendees the opportunity to witness firsthand some of the concepts discussed during the course.

PROGRAM

Day 1 Thursday 20 July 2023	
8.30-9.00	Registration
9.00-9.15	Welcome – Introduction to course. Dr Shawn Nielsen, TIC
9.15-10.00	Tap Changer Principles. Tim Farrell, Reinhausen.
10.00-10.30	Morning Tea
10.30-11.15	Tap Changer Designs and Applications. Tim Farrell, Reinhausen.
11.15-12.00	Maintenance of OLTCs -Manufacturers Recommendations. Tim Farrell, Reinhausen.
12.00-1.00	Lunch
1.00-2.15	Field Diagnostics on OLTC. Omicron.
2.15-3.30	Oil and its use in Tap Changers. Philippe Reboul, Molekulis.
3.30-4.00	Afternoon tea
4.00-5.15	Implementing Life Cycle Oriented Maintenance of tap changers-Utility Experience. Dan Warn, Energy Queensland.
5.15-5.30	Day Close, Dr Shawn Nielsen, TIC Manager
Day 2 Friday 21 July 2023	
9.00-9.15	Welcome-Introduction to Day-2, Dr Shawn Nielsen, TIC Manager
9.15-10.00	OLTC Fault Restoration. Tim Farrell, Reinhausen.
10.00-10.30	Morning Tea
10.30-11.30	Detecting the Health of Tap Changers Using Acoustic Detection. Dr Hui Ma, University of Queensland.
11.30-12.15	Retrofit Options for Tap Changers. Tim Farrell, Reinhausen.
12.15-1.15	Lunch
1.15-2.30	Sampling and Testing of Oils. Antony Giacomini, TJH2b Analytical Services.
2.45-4:30	Practical Demonstrations and Discussions Around Tap Changer Operation, Testing and Experience. TIC Transformer lab.
4.45-5.00	Course Closing, Dr Shawn Nielsen, TIC Manager

PRICE

TIC Members

TIC Industry Platinum Members

- One Complimentary attendee (Conditions Apply)
- Platinum Members additional attendees: \$1300 pp.

Non-TIC Members

- \$2000 pp.

REGISTRATION

Register online via the UQ payments website at: <http://payments.uq.edu.au/ECET104EAI019>

Leave 'VOUCHER CODE' blank and click 'Create Booking.'
Registrations close 19/07/2023 (Unless all places are filled earlier).

VENUE

Elkhorn Building, room 206
University of Queensland Long Pocket Campus, St Lucia
Brisbane
Queensland

ENQUIRIES and FURTHER INFORMATION

Email: transformer@itee.uq.edu.au

Further updates and venue information please follow the "Upcoming sessions" link on the TIC CPD website at: <http://itee.uq.edu.au/event/3960/australasian-transformer-innovation-centre-webinar-and-cpd-courses>

A link to the venue on UQ Maps is:

<http://maps.uq.edu.au/?zoom=15.696837525261001&campusId=562&lat=-27.509239490109813&lng=152.9919675723503&zLevel=1&identifier=a7527c32-0bb4-4a82-b619-221b3b1e34e7>

A link to venue on Google Maps is:

<http://goo.gl/maps/7B1fu7L6FtwLkrcR7>