



Transformer Technology Design and Operation

Offered by The University of Queensland
as part of the Power Generation Skills Development program

15, 16, 17 July and 28, 29 September 2009, Brisbane

Transformer Technology Design and Operation (UQ)

Course code: ELEC7051

Course description

Transformers are an essential component in any electrical system. Correct specification, installation and maintenance determine the viability of the system in which the transformers are installed.

On completion of this course, students will be able to:

- Understand the construction, operation and maintenance of power transformers
- Be familiar with best practice condition monitoring techniques

Students will learn:

- Transformer construction
- Tests before commissioning
- Installation and operation
- Protection
- Condition monitoring and maintenance
- Onsite diagnostic tests - practical experience on transformer maintenance

A general knowledge of the power transformer is required for this course in addition to basic engineering and mathematics skills.

Presenters

Dr. Chandima Ekanayake is a Post Doctoral Research Fellow at School of Information Technology and Electrical Engineering at The University of Queensland. He obtained his PhD in transformer condition monitoring from Chalmers University, Sweden. During the past eight years he has done numerous research works on condition monitoring of transformer

insulation with the collaboration of utilities in both Sweden and Sri Lanka. Dr. Ekanayake was working as a university lecturer for two and half years before joining UQ in 2008.

Professor Tapan Saha has been involved in transformer condition monitoring research for the last 20 years at The University of Queensland. He obtained his PhD from The University of Queensland in transformer condition monitoring and has supervised a number of ARC and industry funded research projects in this area.

Industry experts will be presenting on selected topics.

Power Generation Skills Development

The Power Generation Skills Development program is a joint initiative of Queensland's three Government-owned power generators, Stanwell Corporation, Tarong Energy and CS Energy and three of Australia's leading universities, The University of Queensland (UQ), Central Queensland University (CQU) and Queensland University of Technology (QUT). The Program offers a range of 16 courses developed specifically to meet the skills and training needs of the power industry. More information is available from www.powergeneration.edu.au

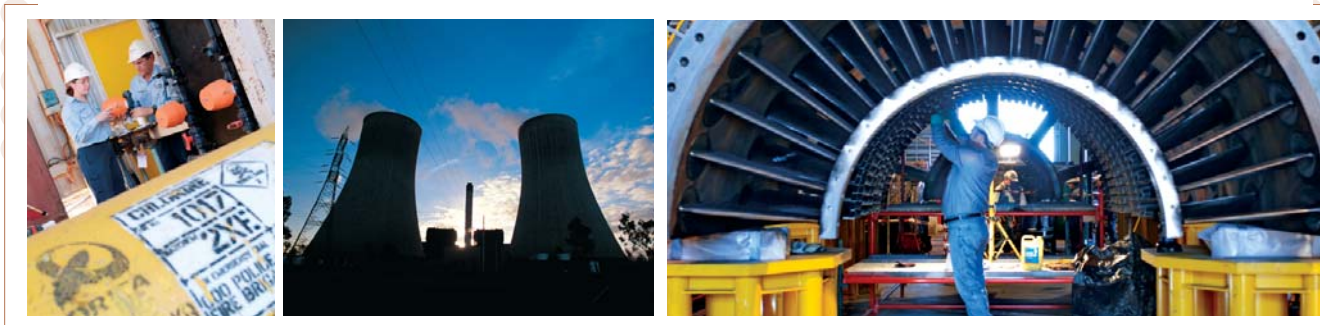
Courses delivered by UQ can be taken on an individual basis or as part of a postgraduate program e.g. Graduate Certificate, Masters of Engineering at any of the partner universities.

Who should attend?

The Power Generation program has been developed to improve the technical competency of professional engineers and those working in para-professional roles within the power sector.

This course will benefit:

- Maintenance supervisors and coordinators
- Plant and maintenance engineering staff
- Operations engineering staff and supervisors
- Technical support staff



Application details

Transformer Technology Design and Operation (ELEC7051) can be taken as a stand alone (non-award) course at UQ or as part of a postgraduate program offered at each of the partner universities.

Available programs: Graduate Certificate, Graduate Diploma*, Masters.

Application deadline for non-award and/or for students who wish to commence a postgraduate program in power generation at UQ in Semester 2: 30 June.

Continuing UQ students need to enrol online by 1 July.

More information is available at www.powergeneration.edu.au

Price and payment details

\$3350.00 (includes course handouts and refreshments)

Students are issued with an electronic invoice once they are enrolled in the course. Further payment details are available from www.uq.edu.au/myadvisor/payment.

Please note, companies which send more than three employees to a Power Generation course provided by The University of Queensland in a semester may request other payment options.

Venue

Transformer Technology Design and Operation (ELEC7051)
Lecture theatre - to be advised
The University of Queensland, St Lucia campus, Brisbane.

Parking is available. A map of the campus and parking options will be emailed to all participants.

Upcoming Power Generation Skills Development courses

Course/Subject code	Title	University	2008 / 2009 Delivery dates	Location
EPG001	Introduction to Power Plant	QUT	Block A1: 9, 10, 11 June 2009 (maximum of eight students) Block A2: 16, 17, 18 July 2009 (maximum of eight students) Block B: 30 June, 1 July 2009	Tarong Power Station, Nanango Qld
EPG015	Protection of Industrial Power Systems	QUT	Block A: 8, 9, 10 July 2009 Block B: 23, 24 July 2009	Brisbane
ELEC7051	Transformer Technology Design and Operation	UQ	Block A: 15, 16, 17 July 2009 Block B: 28, 29 September 2009	Brisbane
ENPG22002	Bulk Materials and Waste Products	CQU	20 - 22 July 2009	Gladstone
EPG005	Project Delivery	QUT	Block A: 3, 4, 5 August 2009 Block B: 24, 25 August 2009	Brisbane Room A316, GP Campus
MECH7260	Gas Plant and Systems	UQ	Block A: 20, 21 August 2009 Block B: 30 September, 1, 2 October	Brisbane
EPG011	Industrial Electrical Power Distribution	QUT	Block A: 14, 15, 16 September 2009 Block B: 5, 6 October 2009	Brisbane
ENPG21001	Asset Management Systems	CQU	2 - 4 November 2009	Gladstone

For more information and for contact details, please visit www.powergeneration.edu.au

*Graduate Diploma available at Central Queensland University only