



# Plant Control Systems

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

21 -23 February and 28, 29 April 2011, Brisbane

## Plant Control Systems

Course code: ELEC7052

### Course description

Control systems are like the brain and nervous system of a power plant. A generating unit represents a complex integration of boiler, turbine and generator systems. While these systems are obviously connected in terms of steam flow and mechanical connection, the integration of the control facilities managing these systems is crucial for the reliable and efficient operation of the plant. This course explores the individual control systems and their interconnection, and provides a bridge between fundamental control theory and power station practice.

### Presenter

Dr Ramesh C Bansal is a senior lecturer in Electrical Engineering at The University of Queensland. He is actively involved in power engineering research, with interests in reactive power control analysis, artificial intelligence techniques in power systems, analysis and control of induction generators, and renewable energy systems.

## 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](http://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

Plant Control Systems (ELEC7052) 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: 31 January 2011

Continuing UQ students are required to enrol online by 1 March 2011.

More information is available at [www.powergeneration.edu.au](http://www.powergeneration.edu.au)

## Price and payment details

\$3520.00 (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](http://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

Plant Control Systems (ELEC7052) will be conducted at The University of Queensland, St Lucia campus, Brisbane. Room and building - to be advised.

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



For more information and for contact details, please visit [www.powergeneration.edu.au](http://www.powergeneration.edu.au)

\*Graduate Diploma available at Central Queensland University only



## 2011 Power Generation Skills Development courses

Course/Subject code	Title	University	2011 Delivery dates	Location
Semester 1, 2011				
EPG001	Introduction to Power Plant	QUT	Block A1: 1 - 3 February Block A2: 8 - 10 February Block B: 8, 9 March	Block A: Tarong Power Station, Nanango Block B: QUT, Gardens Point, Brisbane
ELEC7052	Plant Control Systems	UQ	Block A: 21 - 23 February Block B: 28, 29 April	UQ St Lucia campus, Brisbane
MECH7350	Rotating Machinery	UQ	Block A: 28 - 30 March Block B: 30, 31 May	UQ St Lucia campus, Brisbane
EPG011	Industrial Electrical Power Distribution	QUT	Block A: 3 - 5 May Block B: 24, 25 May	QUT, Gardens Point, Brisbane
ENPG22003	Plant Materials	CQUniversity	Block A: 11 - 13 May	Gladstone
Semester 2, 2011				
EPG015	Protection of Industrial Power Systems	QUT	Block A: 6 - 8 July Block B: 21, 22 July	QUT, Gardens Point, Brisbane
ELEC7051	Transformer Technology Design and Operation	UQ	Block A: 18 - 20 July Block B: 29, 30 September	UQ St Lucia campus, Brisbane
ENPG22002	Bulk Materials and Waste Products	CQUniversity	Block A: 27 - 29 July	Gladstone
EPG001	Introduction to Power Plant	QUT	Block A1: 2 - 4 August Block A2: 9 - 11 August Block B: 23, 24 August	Block A: Tarong Power Station Block B: QUT, Gardens Point, Brisbane
EPG006	Applied Thermodynamics	QUT	Block A: 6 - 8 September Block B: 11, 12 October	QUT, Gardens Point, Brisbane
MECH7260	Gas Plant and Systems	UQ	Block A: 27, 28 September Block B: 18, 19 October	UQ St Lucia campus, Brisbane
EPG005	Project Delivery	QUT	Block A: 4 - 6 October Block B: 24, 25 October	QUT, Gardens Point, Brisbane
ENPG21001	Asset Management Systems	CQUniversity	Block A: 7 - 9 November	Gladstone

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\*Graduate Diploma available at CQUniversity only