



## Plant Materials

Offered by CQUniversity  
as part of the Power Generation Skills Development program

**11 - 13 May, Gladstone**

### Plant Materials

Course code: ENPG22003

### Course description

Plant performance and reliability are key factors impacting on the cost effectiveness of the power generation plant. Corrosion and other modes of failure cost the power generation industry millions of dollars every year. Understanding modes of materials failure is a key skill to ensure the long-term reliability and availability of heavy industrial plant. This course will provide students with an understanding of materials selection, the methods to determine plant integrity, plant fitness for on-going service, plant inspection techniques and examination and testing of components. The course considers the impact of materials selection from both the design context before and during construction of the plant as well as during service, including the importance of failure assessment and maintenance.

### Presenter

Professor Richard Clegg is the Director of the Process Engineering and Light Metals (PELM) Centre based at Central Queensland University and Editor-in-Chief of the journal Engineering Failure Analysis.

Richard's qualifications include a Bachelor of Engineering (Metallurgy) from the University of Queensland and PhD from the University of Cambridge and he is a Fellow of Engineers Australia. Richard has worked as a consultant and expert witness on several major engineering failures in the Queensland minerals industry, as well as in a wide range of other forensic engineering activities.

### 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)

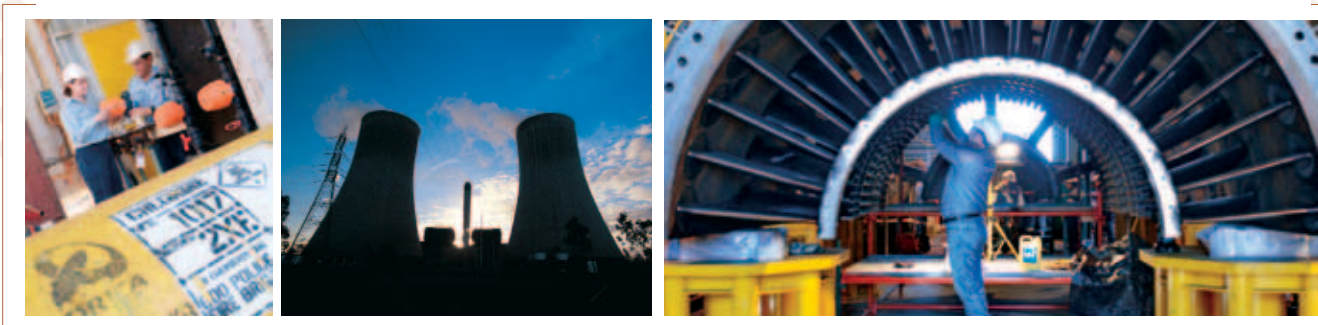
Courses delivered by CQUniversity can be taken on an individual basis or as part of a postgraduate program e.g. Graduate Certificate, Masters of Engineering at any of the partner universities. CQUniversity also offers a Graduate Diploma.

### 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 Materials (ENPG22003) can be taken as a stand-alone (non-award) course at CQUniversity 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 CQUniversity: 18 February 2011

Continuing CQUniversity students are required to enrol online by 18 February 2011.

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

## Price and payment details

\$3250.00 (includes course handouts and refreshments)

Fees are calculated each term on the basis of a student's enrolment. Fee notices are made available to all students approximately 3 to 4 weeks prior to the commencement of each term.

Further payment details are available at <http://mycqu.cqu.edu.au> .

## Venue

Plant Materials (ENPG22003) will be conducted at CQUniversity, Gladstone campus. Room and building - to be advised.

Ample parking is available.



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
<b>Semester 1, 2011</b>				
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	CQUniversity, Gladstone campus
<b>Semester 2, 2011</b>				
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	CQUniversity, Gladstone campus
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	CQUniversity, Gladstone campus

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