



Gas Plant and Systems

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

15, 16 August and 19, 20, 21 September 2011, Brisbane

Gas Plant and Systems (UQ) Course code: MECH7260

Course description

This course provides an overview of Gas Plant and Systems - their operation, performance and maintenance as well as necessary information about gas properties, power cycles, combustion and turbines. The course will introduce most modern and efficient gas power plants running the combined cycle. Gas supply and distribution issues will also be discussed in the course.

On completion of this course students will be able to:

- Describe the various cycles and systems in a gas power plant.
- Understand the basics of combustion, turbo-machinery and concept of efficiency.
- Monitor and maintain plant performance.

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

Presenters

Dr. Alex Klimenko has taught Thermodynamics and Fluid Mechanics for more than 10 years. His research interests are in combustion and coal gasification.

Dr Paul Chaperon has worked in design and product support of gas turbines in Europe for several years. He currently works for CS Energy as the gas turbine plant specialist based at Swanbank Power Station near Brisbane.

Several guest experts who are specialists on different aspects of gas power plant operation and control will also give lectures in this course.

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

Gas Plant and Systems (MECH7260) 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 17 July.

More information is available at 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.

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

Gas Plant and Systems (MECH7260)
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	2011 Delivery dates	Location
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

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

*Graduate Diploma available at Central Queensland University only