



Power Plant Chemistry

Offered by CQUniversity

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Power Plant Chemistry

Course code: ENPG22001

Power Generation is a mechanical and electrical asset intensive business. These mechanical and electrical assets must be managed to optimise the benefits, costs and risks over the full life cycle of the generating plant. A range of asset management strategies can be applied and methods of monitoring effectiveness are considered. Methods of developing projects are evaluating proposals against viability criteria are examined. Generating plants are complex industrial systems and numerous management systems must operate in an integrated fashion to achieve the overall goals.

Course description

Power Plant Chemistry provides students with a comprehensive overview of the role of water in a modern coal-fired power station, with particular emphasis on the chemistry of the Unit Cycle. Topics covered include: chemistry of the unit cycle fluid; chemical cleaning, unit cycle water treatment processes; cooling water chemistry (including stator cooling systems, closed cooling systems, open recirculation cooling towers and open once-through cooling systems); power plant chemical monitoring instrumentation. Students will gain the capacity to develop and evaluate operational methods, identify failure mechanisms and specify remedial treatments

The course is designed by industry and education experts.

Presenter

David Druskovich has over 30 years teaching experience in the chemical sciences. He has taught undergraduate and postgraduate chemistry to science and engineering students at a number of universities. He was a member of the team that developed and presented Unit Cycle Chemistry: A technical view, for the training of graduate station chemists in the power generation industry. In addition to teaching, he has carried out contract research and consultancies for Queensland power generating stations.

Dave Ryan, Power Generation Consultant commenced work in the power generation industry in 1974 as a station chemist at Swanbank power station.

Since then, he has contributed to the design of most power station plants and to the development and implementation of chemical control and monitoring programs in Queensland.

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 would benefit:

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

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



Application details

Power Plant Chemistry can be taken as a stand alone (non-award) course or as part of a postgraduate program offered at each of the partner universities.

Available programs are Graduate Certificate, Graduate Diploma (Graduate Diploma offered at CQUniversity Australia only) and Master's.

Application deadline for this course is 31 Jan, 2012

For online application go to:
<https://applyonline.cqu.edu.au/faces/views/applyonlineWelcom>

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

Price and payment details

\$3400.00 (includes course materials and refreshments)
Students are issued with an electronic invoice once they are enrolled in the course. Further payment details are available from www.cqu.edu.au

Venue

Power Plant Chemistry is delivered over a three day workshop with assignments to be completed after the workshop.

The workshop will be held at CQUniversity Brisbane.

Contact:
Ph: 13 CQUni or 132786
Web: www.cqu.edu.au

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