



# Grid Connected Renewable and Distributed Generation



**CONTINUING PROFESSIONAL DEVELOPMENT  
COURSE: GRID CONNECTED RENEWABLE AND  
DISTRIBUTED GENERATION 27-28 SEPTEMBER 2018**

A two-day professional development course in power engineering presented by the Australian Power Quality and Reliability Centre and the Sustainable Buildings Research Centre at the University of Wollongong.



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA



AUSTRALIAN POWER QUALITY  
AND RELIABILITY CENTRE



SUSTAINABLE  
BUILDINGS  
RESEARCH  
CENTRE



# CONTINUING PROFESSIONAL DEVELOPMENT COURSE: GRID CONNECTED RENEWABLE AND DISTRIBUTED GENERATION

## COURSE OBJECTIVES

Renewable and distributed generation provides an effective means to improve network efficiency, decrease reliance on high carbon emission generation, and allow consumers to increase responsibility for their own electricity needs. However, the rapidly increasing installation of distributed generation to include solar and wind has increased the complexity and uncertainty in operation, control and protection of the networks.

This course will give a practical understanding of the principles, practices and problems associated with grid connection of these resources. Further areas covered in the course include the operation, control and protection of generation-rich electricity distribution networks, network planning and reliability aspects for facilitating integration of these new generating units.

This course will cover mainly solar and wind power integration, and energy storage applications. Delegates will learn fundamental aspects, operation, control and protection techniques, and methods of integration to improve supply quality and reliability for utilities and customers. The course will also include practical case studies of renewable energy integration problems and solutions from local industry experts and researchers.

## COURSE BENEFITS

By attending the course, you will gain knowledge and skills to assist you to:

- appreciate different renewable and distributed generation resources, their operation, and functional aspects;
- have a systematic understanding of the impact of different renewable and distributed generation resources on electricity network operation, control and protection
- gain knowledge of guidelines and standards for integration of these new energy resources into electricity grids
- be aware of the design of interfaces for different types of renewable energy resources and their particular applications for network benefits
- gain a practical understanding of various power quality problems associated with renewable and distributed generation integration including exposure to specific case studies, and
- gain knowledge of how to accommodate these devices economically without violating network constraints.

## WHO SHOULD ATTEND

Managers, utility specialists and technical staff who wish to advise customers on renewable energy integration, or who provide services to large clients, or those who wish to understand aspects of network design, construction and maintenance techniques for maximising renewable energy penetration.

Graduates, end-users or personnel working in all areas of power system design want to understand how the system interacts with distributed generation, will also benefit from attending this course.

## TRAINING INVESTMENT

The course investment provides for an inclusive industry related training package with course notes, lunches and morning and afternoon tea. Course fee per person is **AUD\$1600 including GST**. Participants may count course hours towards their continuing professional development requirements.

**NOTE:** Arrangements for accommodation are the responsibility of participants and costs are not included in the course fee. A list of hotels and motels in the Wollongong area will be supplied to participants upon registration. Daily travel from Sydney is convenient by road or train

## REGISTRATION

To register please click on the link below:

<https://uow.onestopsecure.com/OneStopWeb/RenewDistriGenCourse>

**Note:** There is no guarantee that economic participation levels for this course can be achieved. Registrants will be notified 2 weeks prior to course if the course cannot proceed due to insufficient numbers. The program may be changed at any time due to unforeseen circumstances. If the course cannot proceed for any reason, UOW will not accept liability of whatsoever kind for expenses incurred by any person or corporation with the sole exception of the course investment, which will be refunded in full.

## ENQUIRES

Please call Ms Raina Lewis at the  
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Phone: (02) 4221 3335 Email: [raina\\_lewis@uow.edu.au](mailto:raina_lewis@uow.edu.au)

