Photovoltaic Technology and Manufacturing

SPREE CONTINUING PROFESSIONAL EDUCATION COURSES
ONLINE ON DEMAND
(HYBRID/IN PERSON FINAL SESSION)
A six-week professional development course delivered by the School of Photovoltaics and Renewable Energy Engineering at the University of New South Wales
COURSE OBJECTIVES
How do you fabricate solar cells and modules? How do you go from sand to PV modules? What are the latest developments photovoltaic technologies?

With this course, you will gain a comprehensive overview of solar cell manufacturing and be able to describe some current trends in the field. This course is targeted for professionals working or aspiring to work in the photovoltaics or renewable industry.

SYLLABUS
The course covers the entire PV manufacturing value chain from sand to modules:

1. From sand to silicon wafers
   a. Polysilicon manufacturing
   b. Ingot formation and wafering
2. Solar cell manufacturing
   a. Chemical cleaning and texturing
   b. Diffusion and post diffusion processes
   c. Front and rear surface passivation and minority carrier lifetimes
   d. Rear contact opening and screen printing
   e. Solar cell measurements
   f. Module fabrication
3. Recent trends in solar cells and modules

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

- Apply an understanding of the physics and chemistry underlying the main photovoltaic manufacturing processes to the optimisation of screen-printed solar cell production lines.
- Analyse solar cell performance and losses through the use of common testing and characterisation techniques.
- Use an experimental methodology and apply important manufacturing concepts such as device performance, yield, throughput, quality control to optimise solar cell production lines.
- Communicate an awareness of emerging manufacturable solar cell technologies.

WHO SHOULD ATTEND
- Professional and managers working along the photovoltaic value chain
- Graduates and professional working on photovoltaic technology

COURSE FEE
The course fee per person is
AUD$1,043 including GST.

REGISTRATION

ENQUIRIES
Please contact Dr. Fiacre Rougieux at the School of Photovoltaics and Renewable Energy Engineering at UNSW. Phone: +61 2 9065 3061 Email: fiacre.rougieux@unsw.edu.au

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